

United States Environmental Protection Agency

FISCAL YEAR 2023

Justification of Appropriation Estimates for the Committee on Appropriations

United States Environmental Protection Agency

FY 2023 Budget Overview

The United States Environmental Protection Agency (EPA) is guided by a clear and vital mission: to protect human health and the environment. While the Agency, along with Tribal, state, and local partners, has made great progress in advancing this mission over the last 50 years, much work remains to guarantee that all people living in the United States share in the benefits of clean air, clean water, clean land, and chemical safety. The urgency of climate change raises the stakes of the Agency's work to protect communities. The FY 2023 President's Budget confronts these challenges and outlines how EPA will achieve this work across seven strategic goals and four cross-agency strategies.

The FY 2023 President's Budget request for the EPA totals \$11.881 billion with 16,204.1 FTE to advance Agency efforts to protect the environment and human health. This budget request, a \$2.644 billion increase above the FY 2022 Annualized Continuing Resolution (ACR), will support EPA efforts to tackle the climate crisis, advance environmental justice, clean up air, land, and water pollution, fund scientific research, and position the Agency with the workforce and capacity required to address emerging and ongoing challenges. Additionally, the Budget includes more than \$900 million in new resources to fully fund all of the water programs authorized in the Drinking Water and Wastewater Infrastructure Act (DWWIA). The FY 2023 President's Budget complements the resources provided in the recently enacted bipartisan Infrastructure Investment and Jobs Act (IIJA) and expands the Agency's capacity to protect human health and the environment across the Nation, as provided in the bedrock environmental laws.

EPA's FY 2023 Budget prioritizes tackling the climate crisis and advancing environmental justice and builds on the commitments in the FY 2022 President's Budget. To achieve its mission, EPA recognizes that effective environmental policy must clean up the legacy pollution that many historically overburdened and underserved communities have lived with for far too long. To better align with this vision, the FY 2023 Budget structure reflects the new Environmental Justice National Program Manager to help administer this important work, with resources at headquarters and in all 10 regional offices. The FY 2023 Budget commits to the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

In addition to the FY 2023 President's Budget, EPA is publishing at the same time the FY 2022 – 2026 EPA Strategic Plan, built on four foundational principles: to Follow the Science, Follow the Law, Be Transparent, and Advance Justice and Equity. These principles form the basis of the Agency's culture and will guide its operations and decision making now and into the future. The Strategic Plan establishes the roadmap to achieve the Agency's and Administration's environmental priorities over the next four years and instill scientific integrity in decision making, tackle the climate crisis, and embed environmental justice across Agency programs. The Strategic Plan provides a new framework of strategic goals, objectives, cross-agency strategies, long-term performance goals, and Agency Priority Goals that tether resource investments and actions to the outcomes that will better protect human health and the environment for all people living in the United States.

FY 2023 Funding Priorities

Tackle the Climate Crisis

The FY 2023 Budget prioritizes addressing climate change with the urgency the science demands. EPA's Climate Change Indicators website presents compelling and clear evidence of changes to our climate reflected in rising temperatures, ocean acidity, sea level rise, river flooding, droughts, heat waves, and wildfires. Resources in the Budget support efforts to mitigate and adapt to the impacts of the climate crisis while spurring economic progress and creating good-paying jobs. Both climate mitigation and adaptation are essential components of the strategy to reduce the threats and impacts of climate change. The FY 2023 Budget will enable EPA to work with our partners to address the climate crisis by reducing greenhouse gas emissions; building resilience to climate impacts; and engaging with the global community to respond to this shared challenge.

Through EPA's Climate Protection Program, the Agency is working to tackle the climate crisis at home and abroad through an integrated approach of regulations, partnerships, and technical assistance. EPA plays a lead role to implement a global phasedown of the production and consumption of hydrofluorocarbons (HFCs). These potent greenhouse gases, which are common in refrigerants and aerosols, have global warming potentials hundreds to thousands of times greater than carbon dioxide. This phasedown approach led by EPA will decrease the production and importation of HFCs in the United States by 85 percent over the next 15 years. As a result, it will help promote American leadership in innovation and manufacturing of new climate-safe products and create new jobs in this emerging sector. A global HFC phasedown is expected to avoid up to 0.5 degree Celsius of global warming by 2100. In FY 2023, the Agency invests an additional \$100 million in grants to Tribes and states that will support on-the-ground efforts to reduce methane emissions and increase resiliency in the Nation's infrastructure. The Budget also provides an additional \$35 million and 28 FTE for regulatory and collaborative enforcement and compliance assurance efforts as required by the American Innovation and Manufacturing (AIM) Act of 2020 to facilitate the next phasedown stages for HFCs. The phasedown in the production and consumption of HFCs is a FY 2022-2023 Agency Priority Goal.

In FY 2023, EPA is taking action to reduce dangerous air pollution and greenhouse gases and through mobile source air pollution. For example, the FY 2023 Budget provides \$150 million for the Diesel Emissions Reduction Act (DERA) grant program to expand the availability of DERA grants and rebates to reduce harmful diesel, with a focus on priority areas including school buses, ports, and communities disproportionately affected with air quality problems.² DERA grants accelerate the pace at which dirty engines are retired or retrofitted and target resources in areas with poor air quality, especially those with significant emissions from ports and goods movement. These locations also are often where lower income communities and communities of color suffer from higher levels of pollution. Work in this Program directly supports Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad* and its Justice40 Initiative to target 40 percent of the benefits of climate and infrastructure investments to overburdened and underserved communities.

¹ For more information please visit: https://www.epa.gov/climate-indicators

² DERA Fourth Report to Congress: https://www.epa.gov/sites/production/files/2019-07/documents/420r19005.pdf.

The Agency also will commit \$152.2 million and 350.5 FTE to the Federal Vehicle and Fuels Standards and Certification Program. Resources will support efforts to develop, implement, and ensure compliance with national emission standards to reduce air pollution from light-duty cars and trucks; heavy-duty trucks and buses; nonroad engines and equipment; and from the fuels that power these engines. In December 2021, EPA finalized revised national greenhouse gas (GHG) emissions standards for passenger cars and light trucks for Model Years 2023 - 2026. Executive Order 14037: Strengthening American Leadership in Clean Cars and Trucks kicked off development of a longer-term rulemaking to set emission standards that will save consumers money, cut pollution, boost public health, advance environmental justice, and tackle the climate crisis. In support of this Executive Order and under EPA's Clean Air Act authority, EPA will establish new multi-pollutant emissions standards, including for greenhouse gas emissions, for light- and medium-duty vehicles beginning with model year 2027 and extending through at least model year 2030.

Acting domestically to reduce GHG emissions is an important step to tackle the climate crisis; however, environmental protection is a shared responsibility that crosses international borders, and climate change poses a threat that no one government can solve alone. Through a collaborative approach with international counterparts, we will make progress to abate pollution and tackle the climate crisis. To this end, President Biden has ambitiously laid out a path, by 2030, for the United States to cut greenhouse gas emissions by at least half from 2005 levels. EPA is in a critical position to show our international partners that America is doing its part to reduce global emissions. The FY 2023 request increases funding by \$9 million for EPA's contribution to the international Multilateral Fund (MLF) to support efforts related to the Kigali Amendment to the Montreal Protocol. EPA will continue to engage both bilaterally and through multilateral institutions to improve international cooperation on climate change. These efforts help fulfill EPA's commitment to Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad*.

Tackling the climate crisis depends not only on the Agency's ability to mitigate greenhouse gases but also the capacity to adapt and deliver targeted assistance to increase the nation's resilience to climate change impacts. As part of a whole-of-government approach, EPA will directly support federal partners, Tribes and indigenous communities, states, territories, local governments, environmental justice organizations, community groups, and businesses as they anticipate, prepare for, adapt to, and recover from the impacts of climate change. EPA needs significant resources to ensure it can continue to meet its mission and prepare communities for the risks of climate change. In FY 2023, the Budget provides \$20 million and 12 FTE for Climate Adaptation efforts to strengthen the adaptive capacity of Tribes, states, territories, local governments, communities, and businesses. In addition, EPA will lead through example and prioritize climate resiliency investments across EPA-owned facilities. In FY 2023, EPA will invest \$35 million and 10 FTE to pursue aggressive energy, water, and building infrastructure improvements to advance the Agency's use of carbon-pollution free electricity.

Take Decisive Action to Advance Environmental Justice and Civil Rights

The communities hardest hit by pollution and climate change are most often communities of color, indigenous communities, rural communities, and economically disadvantaged communities. For generations, many of these communities, which also are among the most vulnerable, have been overburdened with higher instances of polluted air, water, and land. The inequity of environmental

protection is not just an environmental justice issue but also a civil rights concern. Neither an individual's skin color nor the wealth of their zip code should determine whether they have clean air to breathe, safe water to drink, or healthy environments in which their children can play. And yet, the development, implementation, and enforcement of environmental laws, regulations, and policies have not always ensured the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income. This year, EPA has added "justice and equity" as a fourth essential principle for its work, and the *FY 2022-2026 EPA Strategic Plan* provides the framework for the Agency to center its mission on the integration of justice, equity, and civil rights across the Nation's environmental protection enterprise.

The FY 2023 Budget reframes how we implement our work by considering environmental justice impacts and benefits across programs. EPA will implement the President's Justice40 Initiative with the goal of delivering at least 40 percent of the overall benefits of relevant federal investments to underserved and overburdened communities. Advancing the Administration's environmental justice priorities is a foundational component of the Agency's FY 2023 Budget, and success requires a whole-of-EPA approach. EPA's Budget recognizes the importance of embedding environmental justice principles in all agency programs and implementing Executive Order 14008: Tackling the Climate Crisis at Home and Abroad, and Executive Order 13985: Advancing Racial Equity and Support for Underserved Communities Through the Federal Government. To elevate environmental justice as a top Agency priority, EPA is proposing a new National Program Manager for environmental justice and external civil rights compliance, to be headed by a Senate-confirmed Assistant Administrator, to coordinate and maximize the benefits of the Agency's programs and activities for underserved communities.

The FY 2023 Budget will expand upon the historic investments in environmental justice in the FY 2022 President's Budget to greatly enhance the Agency's ability to develop, manage, and award new competitive grants to reduce the historically disproportionate health impacts of pollution in communities with environmental justice concerns. In FY 2023, \$300.8 million and 211.9 FTE in the Environmental Justice program will expand support for community-based organizations, indigenous organizations, Tribes, states, local governments, and territorial governments in pursuit of identifying and addressing environmental justice issues through multi-partner collaborations. Delivering tools and metrics for EPA and its Tribal, state, local, and community partners to advance environmental justice and external civil rights compliance is a FY 2022-2023 Agency Priority Goal.

To fully implement its external civil rights mission with quality and consistency and in a way that yields positive and sustainable impacts for the most overburdened and vulnerable communities, EPA must embed civil rights obligations into its programmatic actions and provide the level of funding and staffing necessary for success. All applicants for and recipients of EPA financial assistance, including state and local governments as well as private entities, have an affirmative obligation to comply with federal civil rights laws, both as a prerequisite to obtaining EPA financial assistance and in administering their programs and activities. EPA enforcement of these anti-discrimination provisions is a vital part of the Agency's goal to advance equity and environmental justice. Consistent enforcement of federal civil rights laws for recipients will prevent decisions that can overburden underserved communities and create or exacerbate significant inequities in human health protection and environmental pollution. In FY 2023, EPA

provides a total of \$25.9 million and 121.9 FTE to increase civil rights capacity across the Agency. In the long term, the vigorous enforcement of civil rights laws will address historical and systemic barriers that contribute to the environmental injustice affecting vulnerable communities.

Enforce Environmental Laws and Ensure Compliance

Ensuring compliance and enforcement of the Nation's environmental laws is foundational to achieving EPA's mission. The Agency will hold bad actors accountable for their violations, with a particular focus on communities with multiple pollution sources. In FY 2023, EPA also will provide enhanced tools and technical assistance to the regulated community to support understanding and compliance with environmental laws. EPA will implement a comprehensive action plan in FY 2023 for integrating environmental justice and climate change considerations throughout all aspects of its enforcement and compliance assurance work.

Within EPA's Compliance Monitoring program, \$147.9 million is provided for enforcement and compliance assurance efforts while incorporating environmental justice considerations into programmatic work. EPA will provide targeted oversight and support to Tribal, state, and local programs. The Agency will prioritize work with states to develop methods that successfully leverage advances in both monitoring and information technology to increase the availability of information about environmental conditions in disadvantaged communities.

EPA's Civil Enforcement Program is designed to protect human health and the environment by ensuring compliance with the Nation's environmental laws. In FY 2023, EPA requests \$213.2 million for civil enforcement efforts and to further develop and implement a comprehensive civil enforcement plan for addressing environmental justice, climate change, per and polyfluoroalkyl substances (PFAS) issues, and coal combustion residue rule compliance. PFAS are a group of man-made chemicals that threaten the health and safety of communities across the Nation. These resources will enhance EPA's ability to incorporate environmental justice and climate change considerations into all phases of case development without displacing other important enforcement and compliance assurance work. For example, EPA may focus on opportunities to reduce greenhouse gas emissions while providing co-benefits in underserved communities, expand inclusion of greenhouse gas mitigation and climate resilience remedies, and prioritize environmental justice concerns in case resolutions.

Overburdened and underserved communities are often victims of environmental crime. EPA's FY 2023 Budget supports the development of a specialized Criminal Enforcement Initiative focused on addressing environmental justice issues with other Agency priority National Compliance Initiatives in partnership with the Department of Justice (DOJ). The Criminal Enforcement Initiative focuses on the prioritization of investigative resources to overburdened communities and vulnerable populations, while maintaining case initiation standards and reducing the impact of pollution. The FY 2023 request provides \$69.5 million and 291 FTE to expand EPA's capacity for criminal enforcement to hold illegal polluters accountable, particularly in vulnerable communities.

In FY 2023, EPA also will advance efforts to protect fenceline communities at risk to environmental health hazards from nearby oil and chemical facilities and underground storage tank releases. Fenceline communities are often low-income and/or communities of color facing

disproportionate risks from environmental health hazards, particularly in light of severe weather events caused by a changing climate. With an investment of \$14.6 million and 53.5 FTE provided in FY 2023, EPA will advance protection of these communities by increasing inspections and compliance assistance to ensure nearby facilities are adhering to regulations designed to protect vulnerable populations. This investment also will be used to create and expand programs to improve environmental protections and increase monitoring capability in fenceline communities.

Ensure Clean and Healthy Air for All Communities

Providing clean and heathy air for all communities is a central tenet of EPA's mission. Long-term exposure to elevated levels of certain air pollutants has been associated with increased risk of cancer, premature death, and damage to the immune, neurological, reproductive, cardiovascular, and respiratory systems, while short-term exposure can exacerbate asthma and lead to other adverse health effects and economic costs.³ Relying on the latest science, EPA will continue work to reduce emission of the six National Ambient Air Quality Standards (NAAQS) pollutants—particulate matter (PM), ozone, sulfur dioxide, nitrogen dioxide, carbon monoxide, and lead—and air toxics from mobile and stationary sources. The FY 2023 request leverages several approaches including regulatory tools, innovative market-based techniques, public and private-sector partnerships, community-based approaches, voluntary programs that promote environmental stewardship, and programs that encourage adoption of cost-effective technologies and practices.

The FY 2023 Budget includes \$100 million to develop and implement a community air quality monitoring and notification program to support efforts to ensure equitable environmental outcomes to advance environmental justice for overburdened and marginalized communities. This program will provide real-time data to the public in areas with greatest exposure to harmful levels of pollution. In FY 2023, the Agency will continue to work closely with Tribes, states, and local air quality agencies to develop the most effective approaches to meet community concerns. The request includes resources to fulfill the President's commitment to engage meaningfully with overburdened and vulnerable communities during the entire rulemaking process, from preproposal through final promulgation and implementation.

In FY 2023, EPA will make critical resource investments in air regulatory development and implementation work, particularly to support NAAQS review and implementation activities. The President directed EPA to review the 2020 PM NAAQS and the 2020 Ozone NAAQS in accordance with Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*. In FY 2023, EPA will continue reviewing the NAAQS and make revisions, as appropriate, and has requested resources commensurate to support these reviews. Each review involves a comprehensive reexamination, synthesis, and evaluation of scientific information, the design and conduct of complex air quality and risk and exposure analyses, and the development of a comprehensive policy assessment providing analysis of the scientific basis for alternative policy options. In FY 2023, the Agency provides \$299.4 million and 945.4 FTE to the Federal Support for Air Quality Management program.

The Agency also will seek to address the air quality challenges presented by wildfires. Wildfire smoke can vary from year to year but can typically make up approximately 30 percent of total

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³ For more information, please visit https://www.epa.gov/air-research/research-health-effects-air-pollution

PM2.5 emissions in some regions of the U.S., aggravating heart and lung disease and causing premature death. Climate change has already led to a marked increase in wildfire season length, wildfire frequency, and burned area.⁴ In FY 2023, EPA will work together with the U.S. Forest Service and other federal, state, and community agencies and organizations to improve ways to reduce the public health risk from air pollution resulting from wildfires. Additional resources will enhance EPA's ability to forecast where smoke will impact people and communicate when and where smoke events will occur so communities can be Smoke Ready. The Budget includes an additional \$12.7 million and 15.7 FTE to advance wildfire prevention and readiness in FY 2023.

The Agency also will provide robust financial support through Categorical Grant programs to EPA's Tribal, state, and local partners to support their efforts in implementing air quality management programs. In FY 2023, EPA requests \$322.2 million for the State and Local Air Quality Management program, including \$100 million in grants to Tribes and states that will support on-the-ground efforts to reduce methane emissions. This funding will support state and local air quality networks, air permitting programs, emission inventories, air quality forecasts, air quality training, visibility improvements, and air toxic monitoring efforts. In FY 2023, EPA also requests \$23.1 million for the Categorical Grant: Tribal Air Quality Management program. Funding will assist Tribes to develop and implement air pollution control programs for Indian Country to prevent and address air quality concerns, including mitigating and adapting to the effects of climate change. EPA will work with Tribes to assess environmental and public health conditions in Indian Country by developing emission inventories and, where appropriate, expanding the siting and operating of air quality monitors.

Ensure Clean and Safe Water for All Communities

EPA's most recent clean and drinking water needs assessment surveys, published in 2012 and 2015, respectively, determined that the country will need to invest more than \$743 billion over the next 20 years to maintain, upgrade, and replace critical drinking water and wastewater infrastructure. Today, up to 10 million homes in America and more than 400,000 schools and childcare centers rely on drinking water distribution lines that contain lead—a clear and present danger to the health of children. Replacing these lead pipes and adapting America's water infrastructure to be more resilient to climate change is critical to keeping communities healthy and safe, consistent with the President's Lead Pipe and Paint Action Plan. As the climate warms, more extreme rainfall and flooding events could damage or overwhelm water systems, leaving entire communities without safe water supplies for days or weeks. The Budget builds on the bipartisan IIJA, which provides \$8.429 billion to EPA's State Revolving Funds in 2023.

EPA's water infrastructure financing programs will advance the Agency's ongoing commitment to infrastructure repair and replacement and build climate resilience into the water sector. At the same time, these investments will create hundreds of thousands of good-paying jobs across the

⁴For more information on climate impacts, risk and adaptation in the United States visit: https://nca2018.globalchange.gov/downloads.doi:10.7930/NCA4.2018.

⁵For more information on EPA's Clean Water and Drinking Water Needs Survey Reports, visit: https://www.epa.gov/cwns and https://www.epa.gov/dwsrf/epas-6th-drinking-water-infrastructure-needs-survey-and-assessment

⁶ https://www.whitehouse.gov/briefing-room/statements-releases/2021/12/16/fact-sheet-the-biden-harris-lead-pipe-and-paint-action-plan.

country. In the FY 2023 Budget, EPA proposes approximately \$4.4 billion for water infrastructure programs. This includes a total of \$2.765 billion for the Clean Water State Revolving Funds (CWSRF) and Drinking Water State Revolving Funds (DWSRF), and \$80.3 million for the Water Infrastructure Finance and Innovation Act (WIFIA) program. Also included is approximately \$1.2 billion for grant programs authorized in the Water Infrastructure Improvements for the Nation Act of 2016 (WIIN), the America's Water Infrastructure Act of 2018, and the Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA). These resources are intended to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to communities.

Another goal of the Agency's infrastructure repair and replacement efforts is to address lead and other contaminants such as PFAS in drinking water, especially in small and underserved communities. AWIA strengthened many existing programs within EPA, including programs authorized by the WIIN Act, while creating new programs to tackle significant public health and environmental concerns. DWWIA, as authorized under the IIJA, builds on the foundation of AWIA and WIIN to strengthen the Federal government's ability to upgrade the Nation's drinking water and wastewater infrastructure. These investments will enable the Agency to increase water infrastructure resilience and sustainability, provide assistance for underserved communities, and reduce lead in drinking water. Investing in water infrastructure to enhance the livability and economic vitality of overburdened and underserved communities is a focus of a FY 2022-2023 Agency Priority Goal. In total, the FY 2023 Budget provides approximately \$1.2 billion in funding for the AWIA, WIIN, and DWWIA grant programs, including the creation of twenty new grant programs, which will provide communities with historic funding to address infrastructure needs, provide climate resiliency, and create much needed jobs.

Clean Water and Drinking Water State Revolving Loan Programs

The FY 2023 Budget includes \$1.639 billion for the CWSRF program to capitalize state revolving loan funds in all 50 states and Puerto Rico to finance infrastructure improvements for public wastewater systems and projects to improve water quality. It represents the largest source of federal funds for states to provide loans and other forms of assistance for water quality projects including construction of wastewater treatment facilities, water and energy efficiency projects, and green infrastructure projects. In addition to capitalizing the CWSRF Program, a portion of the request will provide direct grants to communities in Tribal nations and territories. The sanitation infrastructure in these communities often lags the rest of the country, causing significant public health concerns.

EPA's DWSRF is designed to assist public water systems in financing the costs of drinking water infrastructure improvements needed to comply with Safe Drinking Water Act (SDWA) requirements, protect public health, and support Tribal, state, and local efforts to protect drinking water. The FY 2023 Budget requests \$1.126 billion for the DWSRF to help finance critical infrastructure improvements to public water systems. States have considerable flexibility to tailor their DWSRF program to their unique circumstances and needs, allowing each state to carefully and strategically consider how best to achieve the maximum public health protection and

⁷ Jobs Created estimates are based on the *U.S. Water Alliance: The Value of Water Campaign: The Economic Benefits of Investing in Water Infrastructure.*

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infrastructure development that benefit all people living in the United States and are resilient to the impacts of climate change.

Infrastructure within the water sector goes beyond repair and replacement to include the health of the systems used to monitor clean and safe water. In FY 2023, EPA requests \$25 million for a new grant program to advance cybersecurity infrastructure capacity and protections within the water sector. Cybersecurity represents a substantial concern for the water sector, given the prevalence of state-sponsored and other malevolent attacks on the sector as well as the sector's inherent vulnerability and limited technical capacity to address cyber issues.

WIFIA

The WIFIA program, created in 2014, is a critical tool to increase water infrastructure investments by leveraging public and private sources of funds to maximize the reach of federal funds. As of February 2022, the WIFIA program has issued 72 loans to communities across the country totaling \$13.3 billion in credit assistance to help finance nearly \$28 billion for water infrastructure projects. WIFIA loans for these projects have saved communities nearly \$5 billion, which can be used for additional infrastructure investment and to keep rates affordable for water system users. These WIFIA-financed projects have created over 82,000 jobs and serve more than 37 million people, demonstrating that WIFIA credit assistance is an effective tool to help address a variety of water infrastructure needs to support communities nationwide. The FY 2023 request for the WIFIA program would enable EPA to provide up to \$8 billion in direct credit assistance and help spur more than \$16 billion in total infrastructure investments.

Geographic Programs

Beyond water infrastructure, the Agency recognizes the important role federal assistance provides to protect water bodies of special ecological and economic importance to our Nation. Through EPA's Geographic Water programs, the Agency assists states and multi-state partners and Tribes to accelerate and manage the restoration of the ecological health of these water bodies. In total, the FY 2023 request provides \$578.6 million for EPA's Geographic Water programs to advance work on projects that target the most significant environmental problems in these important water bodies and watersheds. In FY 2023, EPA will provide resources to accelerate ecological restoration and sustainable management in the Chesapeake Bay, Columbia River, Gulf of Mexico, the Great Lakes, Lake Champlain, Lake Pontchartrain, Long Island Sound, Northwest Forest Watershed, Puget Sound, San Francisco Bay, South Florida, and Southeast New England. Funding will help monitor and restore these ecological treasures and enable sustainable use for years to come. The Agency also will receive \$343 million under the IIJA to increase support for EPA's Geographic funding in FY 2023.

Safeguard and Revitalize Communities

Cleaning up contaminated lands so that they can be redeveloped and returned to productive use is a challenge faced by many communities. Cleaning up America's most contaminated land and reducing exposure to toxic substances are critical components of the Agency's strategy to address human health, particularly in underserved communities where many of these sites are located. Reuse and restoration of Superfund National Priorities List (NPL) sites directly support the Administration's Justice40 initiative, as articulated in President Biden's Executive Order 14008:

Tackling the Climate Crisis at Home and Abroad, which acknowledges the urgent need to restore lands. Approximately 22 percent of Americans live within three miles of a Superfund site. Recent research shows Superfund cleanup actions lowered the risk of elevated blood lead levels by roughly 13 to 26 percent for children living within 1.24 miles of a Superfund NPL site where lead is a contaminant of concern.⁸ Remediating contaminated land and restoring it to productive use is not only an environmental imperative but presents an economic opportunity as well. A peer reviewed study conducted by researchers at Duke University and the University of Pittsburgh found that residential property values within three miles of Superfund sites increased between 18.7 and 24.4 percent when sites were cleaned up and removed from the NPL.⁹

The FY 2023 Budget enables the Agency to clean up hazardous waste sites in communities across the Nation, including those where vulnerable populations, such as children, the elderly, and economically disadvantaged individuals, reside. These hazardous sites also are vulnerable to the effects of climate change, making remediation even more urgent. Federal data in a recent Government Accountability Office (GAO) report suggests that approximately 60 percent of Superfund sites overseen by EPA are in areas that are vulnerable to wildfires and different types of flooding—natural hazards that climate change will exacerbate. The Agency is working to clean up these sites with climate change in mind to protect at-risk populations. The FY 2023 Budget includes \$454.6 million for the Superfund Remedial program to balance appropriated resources with anticipated Superfund chemical tax receipts that were reauthorized through the IIJA. The Agency will have Superfund chemical taxes collected in FY 2022 that will be available for use in FY 2023. EPA will use the Superfund chemical taxes, along with the \$3.5 billion provided to EPA under the IIJA and other appropriated resources, to implement the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

Like Superfund remediation, investing in brownfields cleanup and redevelopment can revitalize main streets, neighborhoods, and rural communities, increase residential property values, and create good-paying jobs. The FY 2023 Budget includes \$214.8 million to build on current work to provide financial and technical assistance to assess, clean up, and plan reuse at brownfields sites. In FY 2023, the Budget also provides an increase of 60 FTE for Brownfields Community Development Specialists. This investment of 60 regional FTE will provide expanded technical assistance and build capacity in small, rural, environmental justice, and other historically overburdened and underserved communities. These Community Development Specialists manage land revitalization projects, provide one-on-one financial planning support, and educate communities on how to address brownfields-related issues.

Since its inception, the EPA Brownfields Program has fostered a community-driven approach to the reuse of contaminated sites. Approximately 143 million people (roughly 44 percent of the U.S. population) live within three miles of a brownfields site that receives EPA funding.¹¹ As of March

⁸ Details can be found at https://www.epa.gov/environmental-economics/research-environmental-economics-ncee-working-paper-series

⁹ Shanti Gamper-Rabindran and Christopher Timmons. 2013. "Does cleanup of hazardous waste sites raise housing values? Evidence of spatially localized benefits," Journal of Environmental Economics and Management 65(3): 345-360, http://dx.doi.org/10.1016/j.jeem.2012.12.001.

¹⁰ https://www.gao.gov/products/gao-20-73

¹¹ U.S. EPA, Office of Land and Emergency Management 2020. Data collected includes: (1) Superfund, Brownfield, and RCRA Corrective Action site information as of the end of FY 2019; (2) UST/LUST information as of late-2018 to mid-2019 depending on the state; and (3) 2015-2018 American Community Survey (ACS) Census data.

2022, grants awarded by the Program have led to more than 146,300 acres of idle land made ready for productive use and more than 183,000 jobs and \$35.2 billion leveraged. Cleaning up contaminated sites to enhance the livability and economic vitality of overburdened and underserved communities is a focus of a FY 2022-2023 Agency Priority Goal.

In FY 2023, the Agency will continue to invest in domestic recycling and solid waste infrastructure that builds a circular economy. According to the U.S. EPA Recycling Economic Information Report, the U.S. recycling industry supports 680,000 jobs and provides \$5.5 billion annually in tax revenues. In addition to these human resources and financial returns, the materials themselves hold great value, as recent data indicate that materials worth \$9 billion are thrown away each year. The FY 2023 Budget includes \$10.4 million and 43.4 FTE in the Resource Conservation and Recovery Act Waste Minimization and Recyling Program to better support the sustainable management of resources, in addition to \$10 million for Solid Waste Infrastructure in grant funding under State and Tribal Assistance Grants (STAG).

The Agency has a statutory role to ensure that contamination is quickly and effectively cleaned up while ensuring protection of human health and the environment from releases of hazardous substances. In FY 2023, an additional \$10 million is invested to address critical gaps in EPA's ability to oversee federal agencies/facilities cleanup, including Department of Defense PFAS cleanup under CERCLA. The Agency also will assist with homeland security goals by investing \$10 million in critical resources to replace outdated Portable High-Throughput Integrated Laboratory Identification System (PHILIS) equipment. PHILIS is EPA's mobile laboratory asset for the on-site analysis of chemical warfare agent and toxic industrial compound contaminated environmental samples.

Ensure the Safety of Chemicals for People and the Environment

The FY 2023 Budget provides additional resources to build Agency capacity to manage chemical safety and toxic substances. EPA has significant responsibilities under amendments to the Toxic Substances Control Act (TSCA) to ensure the safety of chemicals in or entering commerce and addressing unreasonable risks to human health or the environment. Chemicals and toxic substances are ubiquitous in our everyday lives and are often released into the environment from their manufacture, processing, use, or disposal. EPA's work in managing chemical safety and toxic substances is particularly important to vulnerable populations, including low-income, minority, and indigenous populations, as well as children, who may be disproportionately affected by, and particularly at risk from, exposure to chemicals.

To ensure that EPA can achieve the statutory requirements under TSCA, the Agency needs a substantial increase in scientific expertise and financial resources. To facilitate this need, the FY 2023 Budget provides an additional \$64.0 million and 201 FTE to the TSCA program. Based on five years of implementing TSCA since enactment of the Lautenberg Act, the Agency has determined that additional FTE are required to increase the capacity of the program to address the heavy workload associated with chemical risk evaluations and risk management to support the Agency's ability to meet statutory mandates. EPA will continue to emphasize quality, adherence to statutory intent and timelines applicable to pre-market review of new chemicals, chemical risk

evaluation and management, data development and information collection, and review of Confidential Business Information (CBI) claims.

The Agency also has significant responsibility under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to screen new pesticides before they reach the market and ensure that pesticides already in commerce are safe. In addition, EPA is responsible for complying with the Endangered Species Act (ESA) and ensuring that federally endangered and threatened species are not harmed when the Agency registers pesticides. Endangered species risk assessments involve consideration of risks for approximately 1,200 active ingredients in more than 17,000 pesticide products to more than 1,600 listed endangered species and 800 designated critical habitats in the U.S. Given the complexity of evaluating potential effects to diverse listed species, EPA has been unable to perform ESA evaluations for most of its required actions, which has resulted in numerous successful litigation challenges for registration and registration review actions. To begin making incremental progress toward meeting ESA mandates, the FY 2023 Budget includes an additional \$4.9 million and 10 FTE to enable the Pesticide program to integrate ESA requirements in conducting risk assessments and making risk management decisions that protect federally threatened and endangered species from exposure to new active ingredients.

In FY 2023, EPA will continue to work across environmental programs to advance Agency efforts to tackle PFAS pollution, following the Agency's PFAS Strategic Roadmap. ¹² As part of the President's commitment to tackling PFAS pollution, the FY 2023 Budget provides approximately \$126 million for EPA to increase its understanding of PFAS and human health and ecological effects, restrict use to prevent PFAS from entering the air, land, and water, and remediate PFAS that have been released into the environment. The FY 2023 Budget includes an increase of \$4.2 million and 9 FTE for EPA's Environmentally Preferable Purchasing Program to protect the public from potential effects of PFAS through labeling to help purchasers identify products that meet specific environmental performance criteria.

Restoring EPA's Core Capacity

The FY 2023 Budget includes 16,204.1 FTE, an increase of 1,907.1 above the current level, to restore the Agency's capacity. Strategically increasing staffing levels across the Agency will facilitate and expedite EPA's work to address air, water, and climate priorities and advance environmental justice. EPA strives to provide modern and efficient workforce services and serve as a model for diversity, equity, inclusion, and accessibility. The FY 2023 Budget supports this goal by providing funding for increased efforts to enhance diverse hiring practices and more equitable internship access to build the workforce of the future. The FY 2023 Budget also provides robust support for implementation of the Foundations for Evidence-Based Policymaking Act of 2018. Resources also will ensure the Agency's IT assets and infrastructure are secure. In addition to these investments, the Budget will provide 115 FTE to strengthen EPA's grants and procurement workforce and ensure programmatic integrity. By increasing capacity at the Agency, the FY 2023 Budget will better position the Agency staff to fulfill our mission of protecting human health and the environment efficiently and effectively.

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¹² For more information, please visit: https://www.epa.gov/pfas/pfas-strategic-roadmap-epas-commitments-action-2021-2024

As EPA continues to strengthen its ability to recruit, hire, develop, promote, and retain top talent and to remove barriers to equal opportunity at the management and staff levels, the Agency must also provide resources and opportunities to strengthen and advance diversity, equity, inclusion, and accessibility across executive leadership. The FY 2023 Budget provides \$10 million and 62 FTE to support Agency-wide implementation of and Executive Order 14035: Diversity, Equity, Inclusion, and Accessibility (DEIA) in the Federal Workforce. In FY 2023, EPA will implement the actions identified in the Agency's DEIA Strategic Plan and work to ensure Agency recruitment, hiring, promotion, retention, professional development, performance evaluations, pay and compensation policies, reasonable accommodations access, and training policies and practices are equitable. The requested increase will support two key DEIA initiatives—the SES Candidate Development Program and the paid internship program. The SES Candidate Development Program will emphasize DEIA leadership so future EPA executives reflect the diversity of the American people and are effectively trained in the skills necessary to lead a diverse workforce. The paid internship program is being expanded to provide Federal work experience to more than 180 additional students, including from underrepresented and underserved populations, and provide opportunities for conversion to permanent federal service after successfully completing the program.

Expanded capacity also extends to ensuring that rigorous scientific integrity guides policy and the Agency's regulatory process. Scientific and technological information, data, and evidence-based decision making are central to the development and iterative improvement of sound policies and to the delivery of effective and equitable programs. Environmental challenges in the 21st century are increasingly complex. For example, the interplay between air quality, climate change, and emerging energy options requires different thinking and solutions than those used in the past. These solutions require research that transcends disciplinary lines and involve EPA regions and programs working together with Tribal, state, and local partners, stakeholders, and communities. The FY 2023 request includes \$644 million and 1,853.8 FTE for EPA's Office of Research and Development.

EPA has embarked on a multi-year effort to strengthen how the Agency identifies, prioritizes, and undertakes evidence-building activities and develops evidence-building capacity to inform its policies and decisions, consistent with the Foundations for Evidence-Based Policymaking Act of 2018. The FY 2023 Budget will promote program evaluation as an essential component of federal evidence building. This effort will advance an evaluation culture through a bottom-up approach and increase agencywide engagement in program evaluation. It also provides an opportunity for capacity building throughout the Agency by engaging programs and regions with less evaluation experience and broadening the types of evaluations that the Agency conducts. Work in this area will increase the use of program evaluation and evidence building to inform Agency program, policy, and resource decisions.

In FY 2023, EPA will leverage \$31.6 million, an increase of \$22.6 million, to protect the Agency's information technology infrastructure and support implementation of Executive Order 14028: *Improving the Nation's Cybersecurity*. In FY 2023, EPA will continue implementing multifactor authentication, encrypting data at rest and in transit, implementing "Zero Trust Architecture" network design, and implementing advanced logging technologies. These changes will

dramatically increase information technology resiliency in the event of a malicious attack and limit the amount of damage that can be done by bad actors.

By restoring EPA's core capacity and ensuring that mission support services are adequately funded, the FY 2023 Budget will enable the Agency to carry out its goals effectively while being a good steward of federal resources.

Resource Allocations to Goals and Objectives

In accordance with the Government Performance and Results Act of 1993 (GPRA) and the GPRA Modernization Act of 2010, the FY 2023 Budget identifies resources aligned with the strategic goals and objectives of the Agency's FY 2022 – 2026 EPA Strategic Plan. The Budget also allocates agencywide mission and science support resources and FTE across the goals and objectives. These resources provide support for multiple goals to achieve their objectives. This support involves the provision of foundational agencywide and cross-agency research and development, science, and essential mission assistance services by the EPA Offices of the Administrator (OA), Chief Financial Officer (OCFO), General Counsel (OGC), Inspector General (OIG), Mission Support (OMS), and Research and Development (ORD). The resource summaries by Strategic Goal and Objective within the Congressional Justification provide the total of both direct and allocated resources.

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APPROPRIATION SUMMARY

Budget Authority (Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget
Science & Technology	\$626,895	\$729,329	\$864,155
Environmental Programs & Management	\$2,572,857	\$2,761,550	\$3,796,280
Inspector General	\$38,174	\$43,500	\$55,865
Building and Facilities	\$43,076	\$33,752	\$80,570
Inland Oil Spill Programs	\$19,601	\$20,098	\$26,502
IG Transfer S&T Transfer Superfund Program	\$11,634 \$24,133 \$1,290,597	\$11,586 \$30,755 \$1,163,470	\$12,062 \$31,368 \$1,110,738
Hazardous Substance Superfund Leaking Underground Storage Tanks	\$1,326,363 \$92,830	\$1,205,811 \$92,203	\$1,154,168 \$93,814
State and Tribal Assistance Grants	\$4,557,273	\$4,313,901	\$5,729,143
Hazardous Waste Electronic Manifest System Fund	\$21,652	\$0	\$0
Water Infrastructure Finance and Innovation Fund	\$79,800	\$65,000	\$80,344
SUB-TOTAL, EPA	\$9,378,522	\$9,265,144	\$11,880,841
Cancellation of Funds	\$0	-\$27,991	\$0
TOTAL, EPA	\$9,378,522	\$9,237,153	\$11,880,841

^{*}For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

APPROPRIATION SUMMARY

Authorized Full-time Equivalents (FTE)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget
Science & Technology	2,039.2	1,987.7	2,190.9
Environmental Programs & Management	8,677.8	8,883.4	10,332.1
Inspector General	211.1	227.5	258.5
Inland Oil Spill Programs	78.2	84.8	99.8
IG Transfer S&T Transfer	54.4 68.6	42.5 63.1	42.5 63.1
Superfund Program Hazardous Substance Superfund	2,558.8 2,681.8	2,530.9 2,636.5	2,608.6 2,714.2
Leaking Underground Storage Tanks	43.6	46.6	46.6
State and Tribal Assistance Grants	8.3	7.0	126.6
Hazardous Waste Electronic Manifest System Fund	11.7	11.0	11.0
Water Infrastructure Finance and Innovation Fund	32.8	28.4	40.0
Rereg. & Exped. Proc. Rev Fund	188.2	135.3	135.3
WCF-Reimbursable	221.5	249.1	249.1
Deepwater Horizon Natural Resource Damage Assessment	4.1	0.0	0.0
Pesticide Registration Fund	71.5	0.0	0.0
UIC Injection Well Permit BLM	2.3	0.0	0.0
SUB-TOTAL, EPA	14,272.1	14,297.3	16,204.1
TOTAL, EPA	14,272.1	14,297.3	16,204.1

^{*}For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

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Cross-Agency Strategy 1: Ensure Scientific Integrity and Science-Based Decision Making

Deliver rigorous scientific research and analyses to inform evidence-based decision-making.

EPA's ability to protect human health and the environment depends on the integrity and quality of the information, data, and evidence that provide the scientific foundation for Agency decision making. Identifying and implementing effective strategies, including strategies to adapt to the changing climate, advance environmental justice and equity, and protect children, require that decisions be grounded in the best available science and evidence. EPA's Cross-Agency Strategy 1 in the FY 2022 – 2026 EPA Strategic Plan will strengthen EPA's culture of scientific integrity, advance the delivery of rigorous and independent scientific evaluation and analyses, and ground EPA's actions in the best available science.

Cross-Agency Strategy 1, Ensure Scientific Integrity and Science-Based Decision Making is directly supported by the following long-term performance goals in the FY 2022 – 2026 EPA Strategic Plan:

- By September 30, 2026, increase the annual percentage of Office of Research and Development (ORD) research products meeting partner needs to 95% from a baseline of 93% in FY 2021.¹³
- By September 30, 2026, implement 126 actions for scientific integrity objectives that are certified by Deputy Scientific Integrity Officials in each EPA program and region.

EPA's research and science programs, including the Office of Research and Development's (ORD) Research Centers and the Regional Laboratory Enterprise, support this strategy through the delivery of rigorous scientific research and analyses.

The primary mission of the Agency's Research Centers is to provide the research and science needed to guide EPA's national regulatory process and other long-range decision processes. This research portfolio also enables scientists to provide short-term technical expertise in support of the Agency's national programs, regional offices, and Tribal and state partners. Scientific research and development will support: 1) tackling the climate crisis by addressing the causes and consequences of climate change and developing more resilient communities; 2) addressing current, emerging, and long-term water resource challenges; 3) developing scientific and technical approaches to enhance the Agency's ability to evaluate chemicals and their risks; 4) accelerating the pace of cleanups at contaminated sites so they can be returned to beneficial use; 5) revitalizing and protecting the most vulnerable communities and groups; and 6) conducting environmental risk assessments to better inform policies for protecting human health, particularly for children at all life stages.

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¹³ ORD is tracking environmental justice and climate products as annual performance goals. Please see the Annual Performance Plan table in Tab 14: FY 2023 Performance Measures.

Scientific integrity results from adherence to professional values and practices when conducting, communicating, supervising, and using science. It ensures objectivity, clarity, reproducibility, and utility, and it safeguards against bias, fabrication, falsification, plagiarism, outside interference, censorship, and inadequate procedures and information security. EPA will advance and strengthen a culture of scientific integrity across the Agency by ensuring adherence to the scientific and ethical standards outlined in EPA's Scientific Integrity Policy. To support employees, contractors, and officials, EPA will provide Agency-wide training on scientific integrity. Employees, contractors, and officials have access to Scientific Integrity Officials and their staff and a network of Deputy Scientific Integrity Officials on whom they can rely for advice or to report allegations of a loss of scientific integrity.

In FY 2023, EPA will make significant investments in applied science and tools to support historically overburdened and underserved communities in achieving tangible environmental improvements. EPA will assess the consequences of climate change and the vulnerability of communities and ecosystems to climate change impacts, including wildfires and other extreme events, and identify and evaluate strategies to adapt to and build resilience to these impacts. In addition, EPA will conduct research and provide technical support to assess the distribution, composition, and potential health risks of known and emerging chemical and biological contaminants. EPA will conduct chemical exposure research to develop advanced analytical and computational tools to detect and identify unknown chemicals in complex environmental media, biological media, and consumer products.

EPA also will evaluate and communicate the benefits from remediation, restoration, and revitalization of contaminated sites and provide community-driven solutions with measurable outcomes. These efforts will help communities meet their needs for building resilience to the impacts of climate change, including the health and well-being of those most vulnerable. The Agency will continue to emphasize per- and polyfluoroalkyl substances (PFAS) research, including methods to detect and measure PFAS and PFAS toxicity assessments and exposures. Likewise, the Agency will continue to emphasize lead (Pb) research, including methods to identify lead service lines, model blood levels, and map communities at risk to lead exposure.

The FY 2023 budget request includes resources to enhance the capability of Regional Laboratories, which focus on providing expertise and scientific information needed to make short-term localized decisions. Replacement of older, high-maintenance equipment are critical to the production of accurate data and analyses needed to protect public health and will enable Regional Laboratories to meet growing demands related to contaminants such as PFAS and expand the Regional Laboratory network's capabilities to meet tight turnaround times during national emergencies. In addition, this investment will enable Regional Laboratories to expand their capability to screen, identify, and quantify emerging contaminants, especially in vulnerable and highly exposed individuals in impacted communities.

Cross-Agency Strategy 2: Consider the Health of Children at All Life Stages and Other Vulnerable Populations

Focus on protecting and improving the health of children at all life stages and other vulnerable populations in implementing our programs.

EPA's programs will apply and promote the use of science, policy, partnerships, communications, and action to protect children at all life stages and other vulnerable populations from adverse health effects resulting from exposure to pollution and the impacts of climate change. EPA also will take actions to protect children and other vulnerable populations in underserved communities where socio-economic determinants of health exacerbate the harm caused by these environmental stressors.

Children's environmental health refers to the effect of the environment on children's growth, wellness, development, and risk of disease. EPA actions will be informed by two important considerations; first, the scientific understanding of childhood as a sequence of life stages, from conception through infancy and adolescence to early adulthood (age 21); and second, the recognition that protecting children's health is necessary to protect human health, because every adult was once a child. The effects of early life exposures may become apparent during childhood and/or may not arise until adulthood or in later generations.

Cross-Agency Strategy 2, Consider the Health of Children at All Life Stages and Other Vulnerable Populations is directly supported by the following long-term performance goal in the FY 2022 - 2026 EPA Strategic Plan:

• By September 30, 2026, assess and consider environmental health information and data for children at all life stages for all completed EPA actions that concern human health.

To best protect children's environmental health at all life stages and vulnerable populations, EPA will identify, assess, develop, and promote the use of science to support its policies, decisions, and actions, including regulations and voluntary programs. EPA will ensure that Agency toxicity, exposure, and risk assessments consider all relevant and available science to address the unique vulnerabilities of children and vulnerable populations, including disproportionate impacts related to race, ethnicity, income, or other social determinants of health.

In FY 2023, EPA's Children's Health Program will continue its core work to:

- Coordinate and advance the protection of children's environmental health across the EPA by assisting with development of regulations, improving risk assessment and science policy, implementing community-level outreach and education programs, and tracking indicators of progress on children's health.
- Coordinate two plenary meetings of the Children's Health Protection Advisory Committee, including delivery of an expert review of EPA's Consideration of Legally Working

- Children in Pesticide Exposure Assessment¹⁴ and the issuance of a new charter for this group of experts on issues facing the future of children's health protection nationally.
- Support health care professionals via the Pediatric Environmental Health Specialty Units to better address risks from childhood exposures, particularly in communities with environmental justice concerns.
- Partner with the Department of Health and Human Services to lead the cross-federal President's Task Force on Environmental Health Risks and Safety Risks to Children.

Recognizing the 25th anniversary of Executive Order (EO) 13045: Protection of Children from Environmental Health Risks and Safety Risks¹⁵, in FY 2023 EPA also will:

- Support the EPA Administrator to convene the President's Task Force on Environmental Health Risks and Safety Risks to Children. The focus of this work will be on protecting children from adverse consequences of climate change and disasters, addressing disparities in asthma among children, and reducing childhood lead poisoning.
- Obtain expert input from the National Academies of Science, Engineering, and Medicine to identify the highest scientific priorities to advance children's health for the next quarter century.
- Take actions to protect children in underserved communities who suffer disproportionately from the effects of pollution exposures exacerbated by socio-economic determinants of health.
- Take actions to address children's environmental health that is exacerbated by climate change.

¹⁴ For additional information, please see: https://www.epa.gov/system/files/documents/2021-12/chpac-pesticide final-letter-

¹⁵ Executive Order 13045: Protection of Children's Health from Environmental Health Risks and Safety Risks (April 23, 1997): https://www.epa.gov/children/executive-order-13045-protection-children-environmental-health-risks-and-safety-risks

Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity

Foster a diverse, equitable, and inclusive workforce within an effective and mission-driven workplace.

To support its mission to protect human health and the environment, EPA will make significant progress in FY 2023 to advance organizational excellence and workforce equity. The Agency will strengthen workforce planning of mission-critical positions and support succession management for the next generation of workers while emphasizing diversity, equity, inclusivity, and accessibility (DEIA). EPA will modernize information technology systems, enhance the physical workplace for a hybrid workforce, support employee-friendly work policies, and transition to a paperless work environment. EPA will focus on implementing efficient and effective processes across the full range of Agency efforts, utilizing proven continuous improvement techniques and training to equip staff to solve problems and make improvements to enhance our ability to accomplish our mission. Additionally, EPA will continue to safeguard against cybersecurity risks to protect Agency assets and infrastructure from potentially malicious attacks. Further, EPA will be a leader in the federal government in advancing the sustainability of facilities and operations while developing resiliency to respond to the risks of climate change. EPA will eliminate barriers to its procurement processes through greater diversification of the Agency's vendor base, increasing engagement and technical assistance, and enhancing the Agency's contracts with new vendors, including with small and underserved businesses and targeting businesses located in Historically Underutilized Business Zones (HUBZones). 16

Cross-Agency Strategy 3, Advance EPA's Organizational Excellence and Workforce Equity is directly supported by the following long-term performance goals in the FY 2022 - 2026 EPA Strategic Plan:

- By September 30, 2026, EPA will achieve the highest Diversity, Equity, Inclusion and Accessibility (DEIA) Maturity Level of "Leading and Sustaining" as defined by the November 2021 *Government-wide Strategic Plan to Advance DEIA in the Federal Workforce* and achieve all EPA goals identified in the Agency's Gender Equity and Equality Action Plan.
- By September 30, 2026, improve 1,000 operational processes.
- By September 30, 2026, initiate all priority climate resiliency projects for EPA-owned facilities within 24 months of a completed facility climate assessment and project prioritization.
- By September 30, 2026, EPA will be in full compliance with the five high-priority directives in Executive Order 14028 *Improving the Nation's Cybersecurity*.

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¹⁶ Small Business Administration's HUBZone Program: https://www.sba.gov/federal-contracting/contracting-assistance-programs/hubzone-program.

- By September 30, 2026, award 4% of EPA contract spending to small businesses located in Historically Underutilized Business Zones (HUBZones) compared to the FY 2018-2020 average annual baseline of 2.2%.
- By September 30, 2026, automate the major EPA permitting programs.
- By September 30, 2026, automate all priority internal administrative processes.

In FY 2023, EPA will implement the Agency's Diversity, Equity, Inclusivity, and Accessibility (DEIA) Plan to advance progress towards recruiting and maintaining a workforce representative of the American public that promotes a culture of inclusion and accessibility within the Agency. By the end of FY 2023, EPA will have achieved at least the Level 1: Foundational Capacity maturity level as defined by the November 2021 Government-wide Strategic Plan to Advance DEIA in the Federal Workforce.

In FY 2023, EPA will make progress towards equity goals by eliminating barriers in its procurement processes and increasing the amount of spending on small and disadvantaged businesses. EPA will provide technical assistance to small business vendors on navigating federal contracting requirements and ensure that new EPA procurements are accessible in scope and requirements for small businesses to successfully compete. This work will yield an increase in contract spending awarded to small and socioeconomic businesses, including those located in HUBZones.

In FY 2023, EPA will continue to implement its Future of Work plans that will re-envision both the workforce and the physical workspace of the Agency. Activities will include modernization and transformation of collaborative spaces across several Agency facilities to encourage seamless engagement of a hybrid workforce, leveraging the latest collaboration and productivity IT tools and software, and a continued investment in IT infrastructure to maintain a permanent increase in telework, remote work, and operational readiness. Additionally, EPA will continue to manage increasingly flexible workforce policies and procedures that support a hybrid workforce and enable EPA to be a model employer.

In FY 2023, EPA will continue to pursue information technology systems and infrastructure modernization. Activities will include the enhancement of the electronic records management system to meet Office of Management and Budget (OMB) and National Archives and Records Administration (NARA) requirements to manage records permanently, and automation of internal administrative forms and processes to achieve a paperless work environment. In addition, EPA will increase adoption of Multifactor Authentication, encryption for Agency systems and data, Zero Trust Architecture, and advanced logging requirements to accomplish Executive Order (EO) 14028: *Improving the Nation's Cybersecurity*.

In FY 2023, in support of EO 14008: *Tackling the Climate Crisis at Home and Abroad*, EPA will conduct climate resiliency assessments at five EPA-owned facilities. These assessments will include identifying potential projects the Agency can implement to increase facility resiliency against the impacts of climate change, such as roofing stability, building envelope, and emergency power projects. Following completion of a climate assessment, EPA will initiate high-priority

projects within 24 months. Further, EPA will continue progress towards achieving carbon-pollution free energy use and net-zero emissions in line with Administration sustainability goals.

In FY 2023, EPA will collaborate with the Agency's major permitting programs to establish the target number of permit processes to be automated. Automation of permit processes will reduce processing time on issuing permits, decrease the time between receiving monitoring data and engaging in enforcement actions, and foster transparency by allowing communities to search, track, and access permitting actions easily. Further, permit automation will enable the integration of climate change and environmental justice considerations into permit processes and ensure that they are addressed within the terms and conditions of the permit. For the regulated community, permit automation will allow for a simplified, streamlined, and transparent permitting process which will result in time and costs savings. For communities and stakeholders, permit automation can empower communities, especially communities with environmental justice concerns, to actively participate in the permit decision-making process and post-permit related compliance.

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¹⁷ Broad statutory frameworks for the permitting programs are found in Sections 165, 173, and 502 of the Clean Air Act (42 U.S.C. §§ 7475, 7503, and 7661a), Section 402 of the Clean Water Act (33 U.S.C. § 1342), Section 3006 of the Resource Conservation and Recovery Act (42 U.S.C. § 6926), and Section 1422 and Section 1425 of the Safe Drinking Water Act (42 U.S.C. §§ 300h and 300h-4).

Cross-Agency Strategy 4: Strengthen Tribal, State, and Local Partnerships and Enhance Engagement

Collaborate and engage effectively with Tribal Nations in keeping with the Federal Government's trust responsibilities, state and local governments, regulated entities, and the public to protect human health and the environment.

Protecting human health and the environment is a shared responsibility of EPA and its Tribal, state, and local government partners. With Tribal governments, EPA also has a historic and fundamental trust responsibility. Environmental outcomes are best achieved through collaborative and effective partnerships across all levels of government, successful oversight of federally delegated programs, and robust engagement with non-governmental organizations, national and community groups, stakeholders, and the public, built on a foundation of public trust and transparency, including through timely responses to information requests. Through a renewed focus on fostering intergovernmental relationships, improving on-the-ground community engagement, delivering high-impact environmental education programs, and increasing public trust and transparency, EPA will forge stronger partnerships. As a result, EPA will be better positioned to advance durable solutions to its most pressing challenges and ensure the equitable protection of all communities, including those who have historically been underserved and overburdened.

Cross-Agency Strategy 4, Strengthen Tribal, State, and Local Partnerships and Enhance Engagement is directly supported by the following long-term performance goals in the FY 2022 - 2026 EPA Strategic Plan:

- By September 30, 2026, consider Tribal treaty rights as part of all EPA Tribal consultations that may affect Tribal treaty rights.
- By September 30, 2026, eliminate the backlog of overdue Freedom of Information Act (FOIA) responses, compared to the FY 2021 baseline of 1,056.

In light of the disproportionate impact of environmental pollution on Native Americans, EPA is committed to strengthening its Nation-to-Nation relationship with American Indian and Alaska Native Tribal Nations. EPA will strive to meet its federal trust responsibility and work to integrate consideration of Tribal treaty and reserved rights early into decision making and regulatory processes.

The early, meaningful, and substantial involvement of EPA's co-regulator partners is critical to the development, implementation, and enforcement of the Nation's environmental programs. With a renewed focus on climate, environmental justice, and children's health, EPA will emphasize frequent and early communication as a keystone of its partnership with Tribal and state co-regulators, since EPA must thoughtfully consider their concerns and existing regulatory programs to develop effective and lasting solutions to our most pressing environmental challenges.

In FY 2023, EPA will continue to support the Agency's web-based Tribal Consultation Opportunities Tracking System, a publicly accessible database used to communicate upcoming and current EPA consultation opportunities to Tribal governments. The system provides a management, oversight, and reporting structure that helps ensure accountability and transparency.

In addition, EPA will update key policies and guidances related to overseeing states' implementation of federal environmental programs. These updates are intended to strengthen and improve the Agency's oversight of federally delegated environmental programs to ensure climate change and environmental justice challenges are addressed.

In FY 2023, EPA will enhance transparency, build public trust in Agency actions, and support public participation by strengthening its implementation of the Freedom of Information Act (FOIA). EPA will continue to focus on improving its processing of FOIA requests, in particular, to address the increasing complexity and volume of electronic documents required to be searched, collected, and reviewed when responding to FOIA requests. The Agency will work to increase processing speed and to apply appropriate technologies to ensure it supports the timely searching and collection of information for purposes of responding to FOIA requests and other information needs in a cost-effective and sustainable manner. In addition, in FY 2023, EPA will procure and prepare to launch a new FOIA recordkeeping and processing software solution to replace FOIAonline at the beginning of FY 2024.

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GOAL, APPROPRIATION SUMMARY

Budget Authority (Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget
Tackle the Climate Crisis	\$501,653	\$541,168	\$773,133
Science & Technology	\$155,337	\$170,475	\$245,459
Environmental Programs & Management	\$231,353	\$249,597	\$335,338
State and Tribal Assistance Grants	\$114,963	\$121,095	\$192,335
Take Decisive Action to Advance Environmental Justice and Civil Rights	\$237,375	\$251,714	\$615,435
Environmental Programs & Management	\$132,229	\$148,682	\$481,508
Hazardous Substance Superfund	\$806	\$982	\$7,325
State and Tribal Assistance Grants	\$104,339	\$102,050	\$126,602
Enforce Environmental Laws and Ensure Compliance	\$695,737	\$706,099	\$852,193
Science & Technology	\$18,726	\$21,771	\$22,720
Environmental Programs & Management	\$416,386	\$435,386	\$553,101
Inland Oil Spill Programs	\$3,249	\$3,040	\$5,579
Hazardous Substance Superfund	\$217,389	\$207,736	\$229,006
Leaking Underground Storage Tanks	\$696	\$690	\$734
State and Tribal Assistance Grants	\$39,291	\$37,476	\$41,053
Ensure Clean and Healthy Air for All Communities	\$694,283	\$714,963	\$1,113,916
Science & Technology	\$32,302	\$33,066	\$41,209
Environmental Programs & Management	\$272,095	\$292,214	\$566,277
Hazardous Substance Superfund	\$2,343	\$2,366	\$3,513
State and Tribal Assistance Grants	\$387,543	\$387,317	\$502,917
Ensure Clean and Safe Water for All Communities	\$4,960,117	\$4,862,891	\$6,171,872
Science & Technology	\$6,092	\$16,996	\$9,264
Environmental Programs & Management	\$918,180	\$1,035,828	\$1,125,908

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget
State and Tribal Assistance Grants	\$3,951,186	\$3,741,148	\$4,951,583
Water Infrastructure Finance and Innovation Fund	\$84,617	\$68,919	\$85,117
Deepwater Horizon Natural Resource Damage Assessment	\$26	\$0	\$0
UIC Injection Well Permit BLM	\$15	\$0	\$0
Safeguard and Revitalize Communities	\$1,900,731	\$1,788,656	\$1,836,960
Science & Technology	\$61,853	\$68,560	\$73,285
Environmental Programs & Management	\$242,977	\$280,016	\$327,556
Building and Facilities	\$14,934	\$14,865	\$13,634
Inland Oil Spill Programs	\$20,143	\$20,978	\$26,410
Hazardous Substance Superfund	\$1,124,550	\$1,010,060	\$932,119
Leaking Underground Storage Tanks	\$97,947	\$97,184	\$99,750
State and Tribal Assistance Grants	\$316,674	\$296,994	\$364,206
Hazardous Waste Electronic Manifest System Fund	\$21,652	\$0	\$0
Ensure Safety of Chemicals for People and the Environment	\$388,626	\$399,652	\$517,332
Science & Technology	\$8,546	\$10,162	\$9,857
Environmental Programs & Management	\$333,495	\$345,604	\$447,834
State and Tribal Assistance Grants	\$46,038	\$43,886	\$59,641
Pesticide Registration Fund	\$547	\$0	\$0
Sub-Total	\$9,378,522	\$9,265,144	\$11,880,841
Cancellation of Funds	\$0	-\$27,991	\$0
TOTAL, EPA	\$9,378,522	\$9,237,153	\$11,880,841

GOAL, APPROPRIATION SUMMARY

Authorized Full-time Equivalents (FTE)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget
Tackle the Climate Crisis	1,184.6	1,198.3	1,376.1
Science & Technology	442.2	443.4	509.9
Environmental Programs & Management	659.6	673.8	766.5
State and Tribal Assistance Grants	82.8	81.2	99.7
Take Decisive Action to Advance Environmental Justice and Civil Rights	598.2	616.2	947.9
Environmental Programs & Management	490.8	515.4	832.3
Hazardous Substance Superfund	4.1	4.3	9.5
State and Tribal Assistance Grants	103.3	96.5	106.2
Enforce Environmental Laws and Ensure Compliance	2,925.1	3,021.3	3,219.3
Science & Technology	66.2	76.3	77.3
Environmental Programs & Management	1,922.8	1,972.0	2,148.6
Inland Oil Spill Programs	14.0	14.8	16.0
Hazardous Substance Superfund	890.8	931.7	952.6
Leaking Underground Storage Tanks	3.2	3.4	3.4
State and Tribal Assistance Grants	25.3	23.1	21.4
Rereg. & Exped. Proc. Rev Fund	2.8	0.0	0.0
Ensure Clean and Healthy Air for All Communities	1 (70 4	1.665.4	1 000 0
Science & Technology	1,670.4	1,665.4	1,988.9
Environmental Programs & Management	78.8	79.2	96.6
Hazardous Substance Superfund	1,353.6	1,362.8	1,672.3
State and Tribal Assistance Grants	12.7	11.9	14.7
State and Tribal rissistance Grants	225.4	211.6	205.3
Ensure Clean and Safe Water for All Communities	2,842.1	2,828.8	3,205.0
Science & Technology	25.1	25.0	28.9
Environmental Programs & Management	2,037.8	2,088.4	2,244.8
State and Tribal Assistance Grants	722.2	673.7	877.0

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget
Water Infrastructure Finance and Innovation Fund	50.3	41.8	54.3
Deepwater Horizon Natural Resource Damage Assessment	4.3	0.0	0.0
UIC Injection Well Permit BLM	2.4	0.0	0.0
Safeguard and Revitalize Communities	3,385.8	3,337.5	3,558.1
Science & Technology	156.7	158.0	165.5
Environmental Programs & Management	1,029.1	1,064.6	1,212.8
Building and Facilities	20.8	19.0	15.9
Inland Oil Spill Programs	82.8	89.8	107.4
Hazardous Substance Superfund	1,850.7	1,766.9	1,803.7
Leaking Underground Storage Tanks	63.6	66.9	66.3
State and Tribal Assistance Grants	161.2	152.1	166.2
Hazardous Waste Electronic Manifest System Fund	11.7	11.0	11.0
WCF-Reimbursable	9.2	9.2	9.2
Ensure Safety of Chemicals for People and the Environment			
	1,665.9	1,629.7	1,908.7
Science & Technology	27.8	29.2	28.3
Environmental Programs & Management	1,340.0	1,431.0	1,706.6
State and Tribal Assistance Grants	37.9	34.2	38.5
Rereg. & Exped. Proc. Rev Fund	185.1	135.3	135.3
Pesticide Registration Fund	75.2	0.0	0.0
Sub-Total	14,272.1	14,297.3	16,204.1
TOTAL, EPA	14,272.1	14,297.3	16,204.1

Environmental Protection Agency FY 2023 Annual Performance Plan and Congressional Justification

Tackle the Climate Crisis

Goal 1: Tackle the Climate Crisis—Cut pollution that causes climate change and increase the adaptive capacity of Tribes, states, territories, and communities.

STRATEGIC OBJECTIVES:

- Objective 1.1: Reduce Emissions that Cause Climate Change—Aggressively reduce the emissions of greenhouse gases from all sectors while increasing energy and resource efficiency and the use of renewable energy.
- Objective 1.2: Accelerate Resilience and Adaptation to Climate Change Impacts—Deliver targeted assistance to increase the resilience of Tribes, states, territories, and communities to the impacts of climate change.
- Objective 1.3: Advance International and Subnational Climate Efforts—Collaborate with Tribal, state, local, and international partners and provide leadership on the global stage to address climate change.

GOAL, OBJECTIVE SUMMARY

Budget Authority Full-time Equivalents (Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Tackle the Climate Crisis	\$501,653	\$541,168	\$773,133	\$231,965
Reduce Emissions that Cause Climate Change	\$393,819	\$425,556	\$602,559	\$177,004
Accelerate Resilience and Adaptation to Climate Change Impacts	\$50,941	\$54,855	\$97,228	\$42,373
Advance International and Subnational Climate Efforts	\$56,893	\$60,757	\$73,345	\$12,588
Total Authorized Workyears	1,184.6	1,198.3	1,376.1	177.7

Goal 1: Tackle the Climate Crisis

Cut pollution that causes climate change and increase the adaptive capacity of Tribes, states, territories, and communities.

Introduction

The impacts of climate change are affecting people in every region of the country, threatening lives and livelihoods and damaging infrastructure, ecosystems, and social systems in communities across the Nation. Recent years have seen record-breaking, climate-related weather extremes; worsening droughts, flooding, and wildfires; rising surface, atmospheric, and oceanic temperatures; melting glaciers; diminishing snow cover; shrinking sea ice; rising sea levels; acidifying oceans; and increasing atmospheric water vapor. Certain communities and individuals are particularly vulnerable to these impacts, including low-income communities and communities of color, children, the elderly, Tribes, and indigenous people. Climate change also can exacerbate existing pollution problems and environmental stressors.

Climate change and its impacts challenge EPA's ability to accomplish its mission of protecting human health and the environment. EPA is taking the actions necessary to ensure it continues to fulfill its mission even as the climate changes. EPA is working with other federal agencies to reduce greenhouse gas (GHG) emissions and increase the climate resilience of the Nation, with a particular focus on advancing environmental justice (EJ). Climate change is a global issue, and domestic action must go hand in hand with international leadership. EPA will continue to extend its expertise internationally, while learning from the expertise of others, to help shape and advance international agreements and solutions.

In FY 2023, EPA will drive reductions in emissions that significantly contribute to climate change through regulations on GHGs, climate partnership programs, and support to Tribal, state, and local governments. In addition, the Agency will ensure its programs, policies, regulations, enforcement and compliance assurance activities, and internal business operations consider current and future impacts of climate change and how those impacts disproportionately affect certain communities. EPA will consult and partner with Tribes, states, territories, local governments and communities, businesses, and other federal agencies to strengthen adaptive capacity and increase resilience. By engaging with organizations representing overburdened and underserved communities, EPA will ensure its GHG mitigation and adaptation activities support EJ and equity. Finally, EPA plans to implement international climate engagements that result in an individual partner commitment or action to reduce GHG emissions, adapt to climate change, and improve resilience in a manner that promotes equity. The FY 2023 Budget includes \$773.1 million and 1,376.1 FTE for *Goal 1: Tackle the Climate Crisis*.

Goal 1, Tackle the Climate Crisis is directly supported by the following FY 2022 – 2023 Agency Priority Goal:

• Phase down the production and consumption of hydrofluorocarbons (HFCs). By September 30, 2023, annual U.S. consumption of HFCs will be 10% below the baseline 18 of 303.9 million metric tons of carbon dioxide equivalent (MMTCO₂e) consistent with the HFC phasedown schedule in the American Innovation and Manufacturing (AIM) Act and codified in the implementing regulations. A 10% reduction would decrease the U.S. consumption limit to less than 273.5 MMTCO₂e in 2023.

Objective 1.1: Reduce Emissions that Cause Climate Change – Aggressively reduce the emissions of greenhouse gases from all sectors while increasing energy and resource efficiency and the use of renewable energy.

Objective 1.1, *Reduce Emissions that Cause Climate Change* is directly supported by the following long-term performance goals in the *FY 2022 – 2026 EPA Strategic Plan*:

- By September 30, 2026, promulgate final rules to reduce greenhouse gas (GHG) emissions from light duty, medium-duty, and heavy-duty vehicles; electric utility generating units; and the oil and gas industry.
- By September 30, 2026, EPA's climate partnership programs will reduce expected annual greenhouse gas (GHG) emissions by 545 million metric tons of carbon dioxide equivalent (MMTCO₂e). EPA's climate partnership programs reduced 518.6 MMTCO₂e of annual GHG emissions in 2019.

In FY 2023, EPA will drive significant reductions in the emissions that cause climate change through developing regulations on GHGs; climate partnership programs such as ENERGY STAR; support for Tribal, state, and local governments; and publication of GHG emissions data. An investment of an additional \$100 million in grants to Tribes and states will support on-the-ground efforts to reduce methane emissions and increase resiliency in the Nation's infrastructure. EPA regulations will cut GHG pollutants, including carbon dioxide (CO₂), methane, and hydrofluorocarbons (HFCs). EPA will collaborate closely with stakeholders to promote energy efficiency, renewable energy, and decarbonization of the Nation's electric grid. By continuing the transition away from reliance on high-emitting fossil fuels, EPA programs will cut GHG emissions from cars, trucks, homes, and businesses. In the FY 2023 Budget, \$135.4 million and 236.9 FTE are provided to the Climate Protection Program to advance this critical work.

¹⁸ EPA's final rule, "Phasedown of Hydrofluorocarbons: Establishing the Allowance Allocation and Trading Program under the

MMTCO2e in this document since the public is more familiar with this term than MMTEVe. For more information, see: https://www.epa.gov/climate-hfcs-reduction/final-rule-phasedown-hydrofluorocarbons-establishing-allowance-allocation.

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AIM Act" establishes the HFC production and consumption baselines from which the phasedown steps are measured. Using the equation provided in the AIM Act and based on the data available to the Agency through the Greenhouse Gas Reporting Program (GHGRP) and outreach conducted for this rulemaking, EPA determined that the production baseline is 382.6 million metric tons of exchange value equivalent (MMTEVe) and the consumption baseline is 303.9 MMTEVe. EPA has determined that the exchange values included in subsection (c) of the AIM Act are identical to the GWPs included in IPCC (2007). Therefore, one million metric tons of carbon dioxide equivalent (MMTCO2e) is numerically equivalent to one MMTEVe. EPA is using the measurement

In FY 2023 and beyond, EPA regulations will reduce the emissions of GHGs from mobile and stationary sources and phase down HFCs, which are highly potent GHGs. Under the AIM Act of 2020, EPA will phase down the production and import of HFCs, which are commonly used in refrigerators, air conditioners, and many other applications. The AIM Act directs EPA to sharply reduce production and consumption of these harmful GHG pollutants by using an allowance allocation and trading program. This phasedown will decrease the production and import of HFCs in the U. S. by 85 percent over the next 15 years. A global HFC phasedown is expected to avoid up to 0.5°C of global warming by 2100. An additional \$35 million and 28 FTE is provided for regulatory and collaborative enforcement and compliance assurance efforts as required by the AIM Act to facilitate these next phasedown stages for HFCs.

EPA will set robust federal GHG emissions standards for passenger cars and light trucks to secure pollution reductions through Model Year (MY) 2026. EPA also will set standards for MY 2027 and beyond, to speed the transition of the light-duty vehicle fleet toward a zero emissions future, and update air pollution standards for heavy-duty vehicles. In FY 2023, EPA also will implement a substantially expanded "Phase 2" of the heavy-duty vehicle and engine GHG program. EPA will ensure additional GHG and air quality benefits by testing vehicles, engines, and fuels to certify that they comply with federal clean air, GHG, and fuel economy standards.

In meeting the requirements of Executive Order 13990: Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis¹⁹ and as part of the Administration's comprehensive approach to tackling the climate crisis, EPA will issue rules to reduce CO₂ and methane from power plants and oil and gas facilities. These rules will be informed by robust engagement with Tribes, states, communities, and regulated entities and by any guidance from the judiciary.

Through voluntary partnership programs, EPA will work to incentivize energy efficiency and further decarbonize the transportation, power generation, industrial, and building sectors. Some examples of these programs include ENERGY STAR, Green Power Partnership, Natural Gas STAR, AgSTAR, GreenChill, and SmartWay. In FY 2023, EPA will continue to implement these climate partnership programs to improve delivery of energy efficiency, clean energy, and heat mitigation solutions to historically underserved and overburdened communities. EPA also will continue domestic programs and international collaboration to reduce exposures to harmful emissions from cookstoves.

EPA will facilitate net emission and air quality analyses of increased electric vehicle (EV) use and work with other federal agencies to promote more sustainable and resilient communities. In FY 2023, this includes identifying and pursuing opportunities to reduce barriers to deploying EV charging infrastructure and working with Tribes, states, and communities to ensure equitable distribution and thoughtful community integration of charging infrastructure, including for electric buses and delivery and rideshare vehicles.

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¹⁹ Executive Order 13990: Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis (January 20, 2021): https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/.

EPA will continue to implement the U.S. GHG Reporting Program, which collects and publishes data from more than 8,100 facilities from 41 large industrial source categories in the United States. EPA will improve models of climate change impacts, including how risks and economic impacts can be reduced under mitigation and adaptation scenarios. EPA also will continue to make the Climate Change Indicators website more accessible through enhanced visualization.

In FY 2023, EPA will work to complete the annual Inventory of U.S. Greenhouse Emissions and Sinks. Focus areas will include continued improvements to inventory methodologies in areas such as oil and gas, land-use, and waste, consistent with Intergovernmental Panel on Climate Change (IPCC) guidelines, and to meet upcoming Paris reporting requirements. EPA also will create a new GHG emission calculator, linked to Portfolio Manager, to develop building GHG inventories that fully comply with accounting protocols and local mandates. The Budget includes \$602.2 million and 923.1 FTE to support Objective 1.1.

Objective 1.2: Accelerate Resilience and Adaptation to Climate Change Impacts - Deliver targeted assistance to increase the resilience of Tribes, states, territories, and communities to the impacts of climate change.

Objective 1.2, Accelerate Resilience and Adaptation to Climate Change Impacts is directly supported by the following long-term performance goals in the FY 2022 – 2026 EPA Strategic Plan:

- By September 30, 2026, implement all priority actions in EPA's Climate Adaptation Action Plan and the 20 National Program and Regional Climate Adaptation Implementation Plans to account for the impacts of the changing climate on human health and the environment.²⁰
- By September 30, 2026, assist at least 400 federally recognized Tribes to take action to anticipate, prepare for, adapt to, or recover from the impacts of climate change.
- By September 30, 2026, assist at least 450 states, territories, local governments, and communities, especially communities that are underserved and disproportionately at risk from climate change, to take action to anticipate, prepare for, adapt to, or recover from the impacts of climate change.

EPA will take necessary actions to anticipate, prepare for, and adapt to the impacts of climate change through supporting the development of climate adaptation strategies at the local level while advancing the climate resilience of Tribes, states, territories, local governments, and communities across the Nation. The goal is to ensure EPA continues to fulfill its mission of protecting human health and the environment even as the climate changes and disruptive impacts increase. EPA will actively engage organizations representing overburdened and underserved communities that are more vulnerable to climate impacts to ensure the Agency's adaptation plans reflect the principles of EJ and equity. EPA's commitments are part of a whole-of-government approach to pursue actions at home and abroad to avoid the most catastrophic impacts of climate change. In addition, EPA will lead through example and prioritize climate resiliency investments across EPA-owned

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²⁰ These plans are available at: https://www.epa.gov/climate-adaptation/climate-adaptation-plan.

facilities. EPA will conduct climate resiliency assessments at five EPA-owned facilities and initiate work on the project within the first year. In FY 2023, EPA will invest \$35 million and 10 FTE to pursue aggressive energy, water, and building infrastructure improvements to advance the Agency's use of carbon-pollution free electricity.

In FY 2023, EPA will continue to implement its 2021 Climate Adaptation Action Plan. It will integrate climate adaptation planning into its programs, policies, rulemaking processes, enforcement and compliance assurance activities, financial mechanisms, and operations to ensure they are effective even as the climate changes. Each Program and Regional Office will implement the individual actions identified in FY 2022 to address the five agency-wide priorities from the 2021 EPA Climate Adaptation Action Plan. The Program and Regional Offices strategies are informed by the best available science and deliver co-benefits for mitigation of GHG and other pollution, public health, economic growth and job creation, national security, and environmental justice—all of which will be central to building a more resilient future.

In FY 2023, EPA will provide targeted assistance to Tribes and indigenous peoples, states, territories, local governments, communities, and businesses to bolster these groups' climate resilience efforts. The Agency will focus resources on communities with EJ concerns to develop new strategies that strengthen adaptive capacity and increase climate resilience across the Nation. The Agency will produce and deliver training, tools, technical assistance, financial incentives, and information the Agency's partners indicate they need to adapt and increase resilience to climate change. The Budget includes \$97.2 million and 235.2 FTE to support Objective 1.2.

Objective 1.3: Advance International and Subnational Climate Efforts - *Collaborate with Tribal, state, local, and international partners and provide leadership on the global stage to address climate change.*

Objective 1.3, Advance International and Subnational Climate Efforts, is directly supported by the following long-term performance goal in the FY 2022 - 2026 EPA Strategic Plan:

• By September 30, 2026, implement at least 40 international climate engagements that result in an individual partner commitment or action to reduce greenhouse gas (GHG) emissions, adapt to climate change, or improve resilience in a manner that promotes equity.

Climate change is a global issue that has far-reaching human health, social, economic, and biodiversity impacts on our planet, with direct adverse effects in the United States. Climate change is accelerating the frequency and severity of wildfires and extreme weather events such as hurricanes, floods, heat waves, and drought. It also is altering sea temperature, ocean acidity, and sea-level and other global systems that support human life and biodiversity. Climate change impacts include famine, property loss, mass migrations, human conflict, species extinctions, and ecosystem failures, with significant humanitarian and national security implications. Vulnerable and underserved communities are especially affected. Therefore, EPA is prioritizing efforts to help countries respond to the climate crisis as well as reduce domestic climate impacts. This will require both significant short-term global reductions in GHG emissions and net-zero global emissions by mid-century as well as increased and equitable adaptation and resiliency to climate change impacts. Building on EPA's responsibilities for protection of human health and the environment,

EPA plays a critical role internationally in providing technical expertise, guidance, and capacity building to help countries set and meet ambitious GHG reductions, improve adaptive capacity, and strengthen climate governance.

Executive Order (EO) 14008: *Tackling the Climate Crisis at Home and Abroad*²¹ specifically directs federal agencies to develop plans for integrating climate considerations into their international work, as appropriate and consistent with applicable law. The Order also describes the policy of the Administration to support EJ and spur economic opportunity for communities that have been historically marginalized and overburdened by pollution and underinvestment. This objective supports EPA's role in fulfilling EO 14008 by drawing on EPA expertise to build capacity so countries can set and meet ambitious GHG reduction commitments under the Paris Agreement, while also building resilience to current and future climate impacts. EPA's long-term aim by 2026 is to implement at least 40 international climate engagements that result in an individual partner commitment or action to reduce GHG emissions, adapt to climate change, and/or improve resilience in a manner that promotes equity. In FY 2023 the Budget provides \$73.3 M to advance climate efforts under Objective 1.3.

²¹ Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad* (January 27, 2021): https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

Environmental Protection Agency FY 2023 Annual Performance Plan and Congressional Justification

Take Decisive Action to Advance Environmental Justice and Civil Rights

Goal 2: Take Decisive Action to Advance Environmental Justice and Civil Rights—Achieve tangible progress for historically overburdened and underserved communities and ensure the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income in developing and implementing environmental laws, regulations, and policies.

STRATEGIC OBJECTIVES:

- Objective 2.1: Promote Environmental Justice and Civil Rights at the Federal, Tribal, State and Local Levels—Empower and build capacity of underserved and overburdened communities to protect human health and the environment.
- Objective 2.2: Embed Environmental Justice and Civil Rights into EPA's Programs, Policies, and Activities—Integrate environmental justice and civil rights in all the Agency's work to maximize benefits and minimize impacts to underserved and overburdened communities.
- Objective 2.3: Strengthen Civil Rights Enforcement in Communities with Environmental Justice Concerns—Strengthen enforcement of and compliance with civil rights laws to address the legacy of pollution in overburdened communities.

GOAL, OBJECTIVE SUMMARY

Budget Authority
Full-time Equivalents
(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Take Decisive Action to Advance Environmental Justice and Civil Rights	\$237,375	\$251,714	\$615,435	\$363,721
Promote Environmental Justice and Civil Rights at the Federal, Tribal, State and Local Levels	\$129,289	\$135,614	\$164,581	\$28,967
Embed Environmental Justice and Civil Rights into EPA's Programs, Policies, and Activities	\$66,283	\$70,494	\$383,054	\$312,560

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Strengthen Civil Rights Enforcement in Communities with Environmental Justice Concerns	\$41,803	\$45,606	\$67,801	\$22,194
Total Authorized Workyears	598.2	616.2	947.9	331.7

Goal 2: Take Decisive Action to Advance Environmental Justice and Civil Rights

Achieve tangible progress for historically overburdened and underserved communities and ensure the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income in developing and implementing environmental laws, regulations, and policies.

Introduction

EPA will center its mission on the integration of justice, equity, and civil rights across the Nation's environmental protection enterprise. We will focus on all American communities, those within the contiguous and non-contiguous states and all other territories and protectorates of the United States. By doing so, EPA will advance the promise of clean air, clean water, and safe land to communities across the country that have not fully benefitted from EPA's decades of progress. Centering its work on justice is especially important in an era when EPA must simultaneously break the cycle of historic environmental injustices while maximizing protection for these same communities that are too often hit worst and first from the impacts of a changing climate. In the FY 2022 - 2026 EPA Strategic Plan, EPA is adding "justice and equity" to the Agency's fundamental principles²², as originally articulated by Administrator William Ruckelshaus.

EPA's goal is to achieve measurable environmental, public health, and quality of life improvements in the most overburdened, vulnerable, and underserved communities. Achieving this goal will require significant transformation in how EPA understands and implements its work, including how EPA prioritizes program resources, allocates funding, implements statutory authorities, and engages the communities most affected by environmental and public health threats, especially as the climate changes. Critical to achieving this goal is for EPA to proactively engage with Tribes, states, and local governments to discuss and address disproportionate impacts through their implementation of EPA authorities and engage in meaningful joint planning with communities to advance community visions and priorities.

The vigorous enforcement of civil rights laws also is key to addressing historical and systemic barriers and ensuring recipients of EPA funding make more responsible and equitable siting and permitting decisions. EPA's work on environmental justice and civil rights enforcement will be a success if it leads to reductions in longstanding racial and ethnic disparities such as in levels of air pollutants and exposure to toxins; access to clean and reliable water infrastructure, free of lead and other toxins; management of solid waste; and harmful exposures in communities near contaminated sites.

EPA will work to increase its capacity to tackle environmental justice and civil rights issues and embed consideration of these issues in its programs, policies and process, all with the goal of improving outcomes in environmental and health conditions for communities with environmental justice concerns. The FY 2023 Budget includes \$615.4 million and 947.9 FTE to advance *Goal 2, Take Decisive Action to Advance Environmental Justice and Civil Rights*.

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²² Follow the science, follow the law, and be transparent, and the additional fourth principle: advance justice and equity.

Goal 2, Take Decisive Action to Advance Environmental Justice and Civil Rights is directly supported by the following FY 2022 – 2023 Agency Priority Goal:

• Deliver tools and metrics for EPA and its Tribal, state, local, and community partners to advance environmental justice and external civil rights compliance. By September 30, 2023, EPA will develop and implement a cumulative impacts framework, issue guidance on external civil rights compliance, establish at least 10 indicators to assess EPA's performance in eliminating disparities in environmental and public health conditions, and train staff and partners on how to use these resources.

Objective 2.1: Promote Environmental Justice and Civil Rights at the Federal, Tribal, State, and Local Levels – Empower and build capacity of underserved and overburdened communities to protect human health and the environment.

Objective 2.1, *Promote Environmental Justice and Civil Rights at the Federal, Tribal, State, and Local Levels* is directly supported by the following long-term performance goals in the *FY 2022 – 2026 Strategic Plan*:

- By September 30, 2026, all EPA programs that seek feedback and comment from the public will provide capacity-building resources to communities with environmental justice concerns to support their ability to meaningfully engage and provide useful feedback to those programs.²³
- By September 30, 2026, include commitments to address disproportionate impacts in all written agreements between EPA and Tribes and states (e.g., grant work plans) implementing delegated authorities.²⁴
- By September 30, 2026, EPA programs with direct implementation authority will take at least 100 significant actions that will result in measurable improvements in Indian country.
- By September 30, 2026, all state recipients of EPA financial assistance will have foundational civil rights programs in place.²⁵
- By September 30, 2026, increase by 40% the number of Office of Research and Development (ORD) activities related to environmental justice that involve or are applicable to Tribes, states, territories, local governments, and communities.²⁶

EPA has the potential to make transformative progress on environmental justice and civil rights at the Tribal, state, and local levels through a whole-of-government approach that involves

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²³ First year activities of this LTPG will focus on definition and scope of program participation and what qualifies as capacity-building resources.

²⁴ First year activities of this LTPG will focus on definition and scope of written agreements and what qualifies as addressing disproportionate impacts.

²⁵ For reference only, and as an example from a smaller subset of state recipients - EPA's proactive initiative involving foundational civil rights programs of state agencies in Regions 1, 5, and 7, which consisted of 14 state agencies, the baseline from the proactive initiative in FY 2020 was 6.5%.

²⁶ Baseline to be developed in FY 2022.

communities as authentic partners. In FY 2023, EPA will continue support for community-led action at new levels by providing unprecedented investments and benefits directly to communities with environmental justice concerns as well as by integrating equity throughout all Agency support programs. EPA will ensure that all relevant programs are actively supporting community efforts to engage and influence program implementation and maximize the benefits from the investment of resources to achieve meaningful change on the ground for the most impacted communities. Supporting communities as they adapt to and recover from climate change also is part of this commitment.

Critical to EPA's success in advancing equity and justice is the responsibility to financially support the efforts of community members and organizations that provide EPA with opportunities to learn from and engage with their communities. To meet this responsibility, EPA commits to establishing the necessary policy and procurement mechanisms so that every program and region is able to financially compensate organizations and individuals who provide EPA with community engagement, input, educational opportunities, and other forms of community expertise. In addition, the Agency must take concrete action within EPA to include the voices, experiences, and passions of the full diversity of the Nation, such as bringing in diverse students on paid internships, fellowships, and clerkships.

In FY 2023, EPA national and regional offices will continue to work proactively to integrate environmental justice and civil rights into policies and activities as a fundamental element of the Agency's relationships with federal, state, and local partners to jointly achieve beneficial changes on the ground for communities. EPA will invest in oversight, guidance, and assistance for states and local governments to embed environmental justice into their programs and enhance civil rights enforcement.

Equity principles and equal protection require that implementation of federal environmental law protections be as robust inside Indian country as EPA requires these protections to be outside of Indian country. EPA directly implements the majority of federal environmental programs in Indian country where EPA seeks to apply key environmental justice principles, such as equity, meaningful involvement, and fair treatment. In FY 2023, EPA will continue to ensure that direct implementation activities are fully protective of communities and will advance environmental justice for federally recognized Tribes in keeping with the federal trust responsibility.

EPA will continue in FY 2023 its longstanding commitment to assist Tribes in building the capacity to receive delegated programs. In those instances when Tribal governments are authorized to implement federal programs, EPA supports Tribal governments' inclusion of environmental justice principles into their programs, community engagement, and decision-making processes. Integration of environmental justice principles into all EPA activities with Tribal governments and in Indian Country is designed to be flexible enough to accommodate EPA Tribal program activities and goals, while meeting EPA environmental justice goals. The FY 2023 Budget includes \$164.6 million and 251.1 FTE to advance Objective 2.1.

Objective 2.2: Embed Environmental Justice and Civil Rights in EPA Programs, Policies, and Activities – Integrate environmental justice and civil rights in all the Agency's work to maximize benefits and minimize impacts to underserved and overburdened communities.

Objective 2.2, Embed Environmental Justice and Civil Rights in EPA Programs, Policies, and Activities is directly supported by the following long-term performance goals in the FY 2022 – 2026 Strategic Plan:

- By September 30, 2026, reduce disparities in environmental and public health conditions represented by the indicators identified through the FY 2022-2023 Agency Priority Goal.²⁷
- By September 30, 2026, 80% of significant EPA actions with environmental justice implications will clearly demonstrate how the action is responsive to environmental justice concerns and reduces or addresses disproportionate impacts.²⁸
- By September 30, 2026, all EPA programs that work in and with communities will do so in ways that are community-driven, coordinated and collaborative, support equitable and resilient community development, and provide for meaningful involvement and fair treatment of communities with environmental justice concerns.²⁹
- By September 30, 2026, all EPA programs and regions will identify and implement areas and opportunities to integrate environmental justice considerations and achieve civil rights compliance in their planning, guidance, policy directives, monitoring, and review activities.
- By September 30, 2026, all EPA programs and regions will implement program and regionspecific language assistance plans.
- By September 30, 2026, all EPA programs and regions will implement program and regionspecific disability access plans.

Commitments to achieving change on the ground and accountability for such change will be the ultimate measure of the Agency's success at advancing environmental justice, civil rights, and equity, including the implementation of EO 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, and EO 14008, Tackling the Climate Crisis at Home and Abroad.³⁰ These efforts include incorporating feedback from communities with environmental justice concerns while analyzing and addressing disproportionate impacts. EPA must not only better support community efforts to engage with the Agency but also advance

https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-athome-and-abroad/.

²⁷ EPA will monitor progress through a holistic system that tracks the actions and responsibilities individual national programs have identified to support reducing disparities through the implementation of their statutory authorities, coordinated efforts of regulatory partners, support for community action, and other key actions.

²⁸ First year activities of this LTPG will focus on definition and scope of significant EPA action and what qualifies as environmental justice implications, responsiveness to community concerns, and addressing disproportionate impacts.

²⁹ First year activities of this LTPG will focus on definition and scope of program participation and what qualifies as adoption of the community-driven approach.

³⁰ Executive Order 13985: Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (January 20, 2021): https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-orderadvancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.

Executive Order 14008: Tackling the Climate Crisis at Home and Abroad (January 27, 2021):

the Agency's ability to engage in community-driven work through the regions and across all programs. EPA must follow and implement the Civil Rights Act as equally as environmental statutes.

In FY 2023, EPA will continue progress toward setting ambitious goals of achieving meaningful change on the ground for communities with environmental justice concerns. To do so, EPA will focus on working with programs and regions to set specific objectives, identifying data gaps, building tracking systems, and putting in place any needed policy, guidance, or regulatory changes. EPA also will ensure that Agency plans include responsibility and measurable accountability for advancing environmental justice, including the annual performance plans of key political, senior executive, and general schedule staff. Once these steps have been completed, EPA will develop and commit to at least 10 measures of progress towards achieving meaningful outcomes on the ground.

In FY 2023, EPA will establish policy to ensure that actions with major significance for environmental justice and civil rights are responsive to the needs of communities, consider the results of environmental justice analyses, and reflect recommendations from the National Environmental Justice Advisory Council (NEJAC). EPA also will continue to ensure that all EPA programs develop guidance on the use of environmental justice tools such as EJSCREEN to support decision making.

In FY 2023, EPA will continue to leverage and coordinate its investments in communities and collaborate with partners and other external stakeholders to advance comprehensive and strategic community-driven approaches. EPA will increase the number of programs that have fully integrated the key principles of community work into their program implementation and will continue to build on the number of collaborative partnerships centered on community priorities.

EPA will continue to communicate requirements and expectations related to environmental justice and civil rights to its employees through education, training, outreach, and technical assistance. In particular, EPA will improve employees' awareness and understanding of civil rights enforcement and strengthen intra-agency collaboration to identify whether recipient programs and activities are abiding by civil rights laws or engaging in prohibited discrimination. The FY 2023 Budget includes \$383.1 million and 476.6 FTE to support Objective 2.2.

Objective 2.3 Strengthen Civil Rights Enforcement in Communities with Environmental Justice Concerns - Strengthen enforcement of and compliance with civil rights laws to address the legacy of pollution in overburdened communities.

Objective 2.3, Strengthen Civil Rights Enforcement in Communities with Environmental Justice Concerns is directly supported by the following long-term performance goals in the FY 2022 – 2026 Strategic Plan:

• By September 30, 2026, initiate 45 proactive post-award civil rights compliance reviews to address discrimination issues in environmentally overburdened and underserved communities.³¹

³¹ For comparison, EPA did not initiate a civil rights compliance review in FY 2021.

- By September 30, 2026, complete 305 audits to ensure EPA financial assistance recipients are complying with nondiscrimination program procedural requirements.³²
- By September 30, 2026, complete 84 information sharing sessions and outreach and technical assistance events with overburdened and underserved communities and environmental justice advocacy groups on civil rights and environmental justice issues.³³

To address the legacy of pollution in overburdened communities that results from discriminatory actions, whether direct or indirect, intentional or unintentional, EPA must use the full extent of its authority and resources to enforce federal civil rights laws. EPA is required to enforce federal civil rights laws that prohibit discrimination on the basis of race, color, national origin (including limited English proficiency), disability, gender, and age, in programs or activities that receive Agency financial assistance. To ensure EPA's financial assistance is not being used in a manner that discriminates and subjects already overburdened communities to further harm, EPA must support and promote a robust and mature external civil rights compliance program for execution of EPA responsibilities and to provide a strong partner to its environmental justice program.

EPA's External Civil Rights Compliance Office (ECRCO) is committed to enforcing compliance with federal civil rights laws to address historical and systemic barriers that contribute to the environmental injustice, overburdening, and vulnerability of communities.

In FY 2023, ECRCO will take actions that will result in responsible and equitable siting and permitting decisions by EPA financial assistance recipients that currently result in racially disparate, adverse, and increased burdens and reduce racial and ethnic disparities in exposure to pollutants and toxins, access to clean air and water, and critical health outcomes. EPA will increase the number of affirmative compliance reviews targeting critical environmental health and quality of life impacts in overburdened communities. The Agency will increase the number of guidances issued and improve the effectiveness through corresponding technical assistance deliveries. Further, EPA will increase the timeliness and effectiveness of complaint investigations and resolutions.

In FY 2023, EPA will increase the number of meaningful engagements with overburdened communities and environmental justice advocacy groups on civil rights and environmental justice issues. The Budget includes \$67.8 million and 220.2 FTE in support of Objective 2.3.

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³² For comparison, EPA completed no such audits in FY 2021.

³³ For comparison, EPA completed five such sessions and events in FY 2021.

Environmental Protection Agency FY 2023 Annual Performance Plan and Congressional Justification

Enforce Environmental Laws and Ensure Compliance

Goal 3: Enforce Environmental Laws and Ensure Compliance—Improve compliance with the nation's environmental laws and hold violators accountable.

STRATEGIC OBJECTIVES:

- Objective 3.1: Hold Environmental Violators and Responsible Parties Accountable—Use vigorous and targeted civil and criminal enforcement to ensure accountability for violations and to clean up contamination.
- Objective 3.2: Detect Violations and Promote Compliance— Ensure high levels of compliance with federal environmental laws and regulations through effective compliance tools -- including inspections, other monitoring activities, and technical assistance supported by evidence and advanced technologies.

GOAL, OBJECTIVE SUMMARY Budget Authority Full-time Equivalents (Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Enforce Environmental Laws and Ensure Compliance	\$695,737	\$706,099	\$852,193	\$146,094
Hold Environmental Violators and Responsible Parties Accountable	\$484,168	\$484,575	\$568,735	\$84,160
Detect Violations and Promote Compliance	\$211,568	\$221,524	\$283,458	\$61,934
Total Authorized Workyears	2,925.1	3,021.3	3,219.3	198.1

Goal 3: Enforce Environmental Laws and Ensure Compliance

Improve Compliance with the Nation's environmental laws and hold violators accountable.

Introduction

A robust compliance monitoring and enforcement program is necessary to ensure communities get the environmental and human health benefits intended by environmental statutes and EPA's regulations. EPA regulates more than 1.2 million facilities subject to a variety of environmental statutes that protect human health and the environment. Likewise, EPA regulates a wide range of products, from automobiles to pesticides. In FY 2023, EPA will continue to work cooperatively with Tribes, states, and territories to improve compliance with environmental laws and statutes. EPA will continue to collaborate with Tribes in Indian country, by both directly implementing compliance monitoring and enforcement programs and supporting and overseeing Tribes' implementation of approved programs. In FY 2023, EPA will provide \$852.2 million and 3,219.4 FTE to strengthen compliance with the Nation's environmental laws and hold violators accountable.

In FY 2023, EPA will collaborate with Tribes, states, and territories to focus federal enforcement resources on the most serious environmental problems where noncompliance with environmental statutes and regulations is a significant contributing factor and where federal enforcement can have a significant impact on the Nation's air, water, and land. The Agency will continue to identify a small number of key areas, called National Compliance Initiatives, where EPA focuses attention on the most significant, widespread environmental problems.

In addition to other core work, EPA will focus on vulnerable communities and those facing substantial burdens from environmental noncompliance. In these areas, EPA will seek to increase inspections, prioritize enforcement cases, identify remedies with tangible benefits for impacted communities, and increase engagement with communities about enforcement cases. In FY 2023, EPA also will target compliance monitoring in communities with environmental justice concerns. EPA will continue to initiate enforcement actions to protect against children's health hazards in areas such as exposure to lead paint, the presence of lead and other contaminants in drinking water, and particulate air emissions that aggravate asthma.

The Agency will address climate change by directing resources to ensure effective enforcement responses for those sources with noncompliant emissions of greenhouse gases (GHGs) and develop remedies that are consistent with GHG mitigation and climate resilience goals. In addition, EPA will enforce against the illegal import, distribution, and use within the United States of hydrofluorocarbons (HFCs), which are chemicals with potent global warming potential, and pursue violators of the Renewable Fuel Standard.

EPA will continue implementing the Foundations for Evidence-Based Policymaking Act,³⁴ coordinated by EPA's Evidence Act officials. The Agency will expand its evidence-based compliance program through the continued development of OECA's compliance learning agenda, which began in FY 2021. This effort will systematically identify the most important evidence the

³⁴ Full-text of the Foundations for Evidence-Based Policymaking Act of 2018: https://www.congress.gov/bill/115th-congress/house-bill/4174/text.

Agency needs to gather and generate to advance its compliance goals, and ensure the Agency uses high quality data and other information to inform policy and decision making.

Objective 3.1: Hold Environmental Violators and Responsible Parties Accountable – *Use* vigorous and targeted civil and criminal enforcement to ensure accountability for violations and to clean up contamination.

Objective 3.1, *Hold Environmental Violators and Responsible Parties Accountable* is directly supported by the following long-term performance goal in the *FY 2022 – 2026 Strategic Plan*:

• By September 30, 2026, reduce to not more than 93 the number of open civil judicial cases more than 2.5 years old without a complaint filed.³⁵

Enforcement is essential to ensuring that everyone is protected by the Nation's environmental laws and regulations. EPA strives to not only return violators to compliance but also obtain timely relief needed to address the underlying causes of the violations, to prevent reoccurrence, and, in appropriate cases, mitigate the harm to the communities impacted by noncompliance. EPA uses Alternative Dispute Resolution (ADR), where appropriate, in the environmental enforcement context.

Civil Enforcement

The overall goal of EPA's Civil Enforcement Program is to maximize compliance with the Nation's environmental laws and regulations to protect human health and the environment. In FY 2023, EPA will encourage regulated entities to correct violations rapidly, ensure that violators do not realize an economic benefit from noncompliance, pursue enforcement to deter future violations, and continue to strengthen environmental partnerships with Tribes and states. Resources will enhance EPA's ability to incorporate environmental justice and climate change considerations into all phases of case development without displacing other important enforcement and compliance assurance work. EPA also will pursue enforcement actions at federal facilities where significant violations are discovered, ensure that federal facilities are held to the same standards as the private sector, and provide technical and scientific support to Tribes, states, and territories with authorized programs.

EPA has been working to improve the processes associated with enforcement actions to move faster in protecting the environment. In FY 2021, EPA continued to reduce the number of all referred no complaint filed (RNCF) civil judicial cases that are more than 2.5 years old by staying below the target of 99 throughout the fiscal year (and well below the original baseline of 129 RNCF in 2018). EPA will continue to build upon this success to further improve upon our accomplishments. EPA requests \$213.2 million and 1,004.2 FTE for the Civil Enforcement Program in FY 2023.

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³⁵ For comparison, there were 129 cases more than 2.5 years old without a complaint filed as of June 30, 2018. The number of cases fluctuates and is therefore difficult to predict how many cases will "age in" in a given year. EPA reduces the number of older cases using a number of different tools. For example, sometimes the United States government needs to file a complaint in order to make progress in resolving a case; other times, it needs to drop a claim or shift its injunctive relief or penalty demand because of litigation risk.

Criminal Enforcement

EPA's Criminal Enforcement Program enforces the Nation's environmental laws through targeted investigation of criminal conduct committed by individual and corporate defendants who threaten public health and the environment. EPA's Criminal Enforcement Program plays a critical role across the country supporting Tribes, states, and territories that may have limited capacity to investigate and prosecute environmental crimes. As a result of the collaborative efforts with our enforcement partners (including the U.S. Department of Justice), in FY 2021, the conviction rate for criminal defendants was 95.9 percent. In FY 2023, the Agency requests \$69.5 million and 291.0 FTE to support the Criminal Enforcement Program by targeting investigations on the most egregious environmental cases.

Superfund Enforcement

Through the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or Superfund), EPA will facilitate prompt site cleanup. EPA uses an "enforcement first" approach before turning to taxpayer dollars to fund cleanups, by maximizing Principal Responsible Party (PRP) involvement at Superfund sites. The Superfund Enforcement Program works to ensure that viable and liable PRPs pay to clean up sites and seeks to recover costs if EPA expends Superfund-appropriated dollars to clean up sites. These enforcement efforts allow the Trust Fund to be used at those sites that have no funding source other than appropriated resources and have no other means of cleanup. Thus, Superfund enforcement helps to get Superfund sites cleaned up in a timely manner in addition to getting more sites cleaned up than would be possible using only government funds. In 2021, the Superfund Enforcement Program secured private party commitments for cleanup and cost recovery and billed for oversight amounts totaling more than \$2.1 billion. The use of Superfund enforcement tools in 2021 resulted in cleanup and redevelopment at 153 private-party sites. In FY 2023, EPA requests \$166.5 million and 771.8 FTE to support Superfund Enforcement and will focus its resources on the highest priority sites, particularly those that may present an immediate risk to human health or the environment.

Objective 3.2: Detect Violations and Promote Compliance – Ensure high levels of compliance with federal environmental laws and regulations through effective compliance tools – including inspections, other monitoring activities, and technical assistance supported by evidence and advanced technologies.

Objective 3.2, *Detect Violations and Promote Compliance* is directly supported by the following long-term performance goals in the *FY 2022 – 2026 Strategic Plan*:

- By September 30, 2026, send 75% of EPA inspection reports to facilities within 70 days of inspection.³⁶
- By September 30, 2026, conduct 55% of annual EPA inspections at facilities that affect communities with potential environmental justice concerns.³⁷

³⁶ For comparison, 46% of inspection reports were sent within 70 days of inspection at the end of FY 2018.

³⁷ The baseline for this measure is 27% based on average of FY 2017 - FY 2019.

Effective targeting of compliance monitoring, including inspections in communities with environmental justice concerns, plays a critical role in achieving the goals EPA has set forth for protecting health and the environment. Achieving high rates of compliance with environmental laws and regulations requires the use of a wide range of compliance tools, including compliance monitoring. Through its ongoing process of selecting National Compliance Initiatives in collaboration with Tribes, states, and territories, EPA will focus its work on critical areas of noncompliance.

EPA will continue to emphasize the importance of providing facilities with a completed inspection report notifying the facility of any potential compliance issues. Providing these reports in a timely manner allows the facility to address compliance issues more quickly, which would directly benefit the communities affected by the environmental and human health impacts of the alleged violations. In FY 2020, EPA increased the percentage of inspection reports provided to facilities within 70 days of inspection to 85 percent (from a baseline of 46 percent).

In FY 2023, EPA will continue to develop and implement a comprehensive action plan for integrating environmental justice and climate change considerations throughout all aspects of the Program. In addition to increasing the percentage of inspections impacting overburdened communities, EPA will provide greater public access to compliance data to facilitate a community's ability to better understand and manage risks. EPA will advance its efforts to address climate change mitigation and adaptation issues through targeting of inspections, compliance monitoring, and technical assistance directed to sources with the most potential for noncompliant emissions of greenhouse gases which contribute to climate change.

EPA will further expand the Agency's Compliance Advisor Program (formerly called the Circuit Rider Program), which reduces noncompliance at small public water systems (PWSs) and small wastewater treatment facilities (WWTFs) by providing hands-on technical assistance. To date, Compliance Advisors have provided support to approximately 165 small PWSs and 68 WWTFs in under-resourced communities nationwide. Hundreds more small systems and facilities across the Nation need technical support to help them achieve and stay in compliance and provide clean and safe water to the communities they serve.

In FY 2023, EPA will continue its implementation of the Evidence Act by continuing its work on the "Drinking Water Systems Out of Compliance" learning priority area of EPA's Learning Agenda. EPA also will expand its ongoing work with Tribes, states, and academic experts to develop and implement OECA's compliance learning agenda: prioritizing the most pressing programmatic questions; planning evidence-based studies to address these questions; and identifying effective and innovative approaches for improving compliance.

In FY 2023, EPA will continue the data system modernization effort to better support Tribes, states, local governments, and the public's need for information with modernized technology and it will implement EPA's enterprise-wide Digital Strategy with shared IT services. Modernization will facilitate EPA's efforts to better target noncompliance that impacts overburdened and vulnerable communities and will increase the availability of information about environmental conditions in those communities and elsewhere.

FY 2023 funding will allow EPA to expand software solutions for field inspectors to improve the effectiveness and efficiency of compliance inspections conducted by EPA and authorized states. Smart Tools software allows EPA to use its compliance monitoring resources more efficiently, including documenting field inspections, preparing inspection reports, and monitoring for noncompliance that affects overburdened and vulnerable communities or that has climate impacts. It also allows EPA to make inspection reports more available to regulated entities and to the public in affected communities.

Through the State Review Framework, EPA periodically reviews authorized state compliance monitoring and enforcement programs for Clean Air Act Stationary Sources, Resource Conservation and Recovery Act Hazardous Waste facilities, and the Clean Water Act National Pollutant Discharge Elimination System dischargers. This review is conducted using criteria agreed upon by states to evaluate performance against national compliance monitoring or enforcement program standards. When states do not achieve standards, the Agency works with them to make progress. However, EPA may take a lead implementation role when authorized states have a documented history of failure to make progress toward meeting national standards. In total, EPA provides \$147.9 million and 463.4 FTE to detect violations and promote compliance with environmental laws.

Environmental Protection Agency FY 2023 Annual Performance Plan and Congressional Justification

Ensure Clean and Healthy Air for All Communities

Goal 4: Ensure Clean and Healthy Air for All Communities—Protect human health and the environment from the harmful effects of air pollution.

STRATEGIC OBJECTIVES:

- Objective 4.1: Improve Air Quality and Reduce Localized Pollution and Health Impacts—Reduce air pollution on local, regional, and national scales to achieve healthy air quality for people and the environment.
- Objective 4.2: Reduce Exposure to Radiation and Improve Indoor Air—Limit unnecessary radiation exposure and achieve healthier indoor air quality, especially for vulnerable populations.

GOAL, OBJECTIVE SUMMARY

Budget Authority
Full-time Equivalents
(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Ensure Clean and Healthy Air for All Communities	\$694,283	\$714,963	\$1,113,916	\$398,953
Improve Air Quality and Reduce Localized Pollution and Health Impacts	\$606,907	\$623,255	\$988,626	\$365,372
Reduce Exposure to Radiation and Improve Indoor Air	\$87,376	\$91,708	\$125,290	\$33,581
Total Authorized Workyears	1,670.4	1,665.4	1,988.9	323.5

Goal 4: Ensure Clean and Healthy Air for All Communities

Protect human health and the environment from the harmful effects of air pollution.

Introduction

All people regardless of race, color, national origin, or income deserve to breathe clean air outside and indoors, and it is especially important to protect the health of vulnerable and sensitive populations including children and persons adversely affected by persistent poverty or inequality. Numerous scientific studies have linked air pollution and specific pollutants to a variety of health problems and environmental impacts. Long-term exposure to elevated levels of certain air pollutants is associated with increased risk of cancer, premature mortality, and damage to the immune, neurological, reproductive, cardiovascular, and respiratory systems. Levels of air pollutants linked to health impacts have continued to decline even as the economy has grown significantly over the long term. Between 1970 and 2020, the combined emissions of six key pollutants dropped by 78 percent, while the U.S. economy remained strong – growing 272 percent over the same period. Yet poor air quality still affects millions of people across the country, affecting near and long-term health and quality of life. EPA will continue to build on its historic progress and work to assure clean air for all Americans, with a particular focus on those in underserved and overburdened communities.

In FY 2023, EPA will ensure clean and healthy air for communities by reducing emissions of ozone-forming pollutants, particulate matter, and air toxics. EPA also will work to address high-risk indoor air quality pollutants in homes, schools, and workplaces. The Agency will rely on proven approaches including regulatory tools, innovative market-based techniques, public and private-sector partnerships, community-based approaches, technical assistance programs that promote environmental stewardship, public education, and programs that encourage adoption of cost-effective technologies and practices. Understanding that many sources of air pollutants also are sources of greenhouse gases, the Agency will look to control strategies that can reduce both air pollution and the impacts of climate change. In the FY 2023 Budget, \$1.114 million and 1,988.9 FTE are allocated to advance EPA efforts in protecting human health and the environment from the harmful effects of air pollution.

Objective 4.1: Improve Air Quality and Reduce Localized Pollution and Health Impacts – Reduce air pollution on local, regional, and national scales to achieve healthy air quality for people and the environment.

Objective 4.1, *Improve Air Quality and Reduce Localized Pollution and Health Impacts* is directly supported by the following long-term performance goals in the *FY 2022 – 2026 Strategic Plan*:

- By September 30, 2026, ensure U.S. consumption of hydrochlorofluorocarbons (HCFCs) is less than 76.2 tons per year of ozone depletion potential.³⁸
- By September 30, 2026, reduce ozone season emissions of nitrogen oxides (NO_x) from electric power generation sources by 21% from the 2019 baseline of 390,354 tons.

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³⁸ The U.S. HCFC consumption baseline is 15,240 ODP-weighted metric tons effective as of January 1, 1996.

- By September 30, 2026, improve measured air quality in counties not meeting the current National Ambient Air Quality Standards (NAAQS) from the 2016 baseline by 10%.
- By September 30, 2026, strive to ensure all people with low socio-economic status (SES) live in areas where the air quality meets the current fine particle pollution (PM2.5) National Ambient Air Quality Standards (NAAQS).

In FY 2023, EPA will work collaboratively with Tribal and state air agencies to maintain and improve the Nation's air quality. EPA will focus particularly on advancing environmental justice by engaging with local communities that have been historically underserved on key activities including technical assistance, regulation development, and financial assistance. In FY 2023, \$988.6 million and 1,636 FTE are allocated to advance efforts to improve air quality and reduce localized pollution and health impacts across the country.

Taking into account the most current research health effects findings and changing conditions from a warming climate, EPA will review the NAAQS and make revisions, as appropriate. Specifically, the President directed EPA to review the 2020 Particulate Matter (PM) NAAQS and the 2020 Ozone NAAQS.³⁹ EPA will work to improve air quality in areas not in attainment with the NAAQS, including assisting Tribes and states in developing Clean Air Act (CAA)-compliant State Implementation Plans (SIPs). EPA will continue reviewing regional haze SIPs, working closely with states to improve visibility in the country's national parks and wilderness areas.

EPA will reduce air pollution by focusing on the transportation sector's largest contributors to criteria pollutant and GHG emissions: light-duty vehicles (LDVs) and heavy-duty vehicles (HDVs). EPA will continue to work to ensure that Clean Air Act requirements are met for new transportation projects with heavy-duty diesel traffic, such that they do not worsen air quality near communities with environmental justice concerns. The Agency will collaborate with a broad range of stakeholders to develop targeted, sector-based, and place-based strategies for diesel fleets, including school buses, ports, and other goods movement facilities.

In FY 2023, EPA will continue to operate nationwide and multi-state programs, such as the Acid Rain Program and the Cross-State Air Pollution Rules, that address major global, national, and regional air pollutants from the power sector and other large stationary sources. EPA also will work on several regulatory actions related to criteria, air toxics, and GHG pollution from power plants.

As part of a forward-looking air toxics strategy, EPA will address regulatory and emerging issues and improve access to air toxics data. The Agency will share air toxics data faster and more regularly with the public, allowing for increased transparency and the ability to see trends and risks over time. EPA also will enhance risk assessment capabilities to better identify and determine the impacts of exposures to air toxics on communities.

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³⁹ Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis* (January 20, 2021): https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/.

EPA will continue to protect and restore the stratospheric ozone layer by reducing the use, emissions, import, and production of ozone-depleting substances (ODS) in the United States. By 2022, U.S. consumption of HCFCs, chemicals that deplete the Earth's protective ozone layer, will be less than 76.2 tons per year of ozone depletion potential compared to the 2015-2019 target of 1,520 tons per year. Under the American Innovation and Manufacturing (AIM) Act, EPA will continue to phase down the production and consumption of hydrofluorocarbons, review and list alternatives that are safer for the ozone layer and facilitate the transition to next-generation technologies.

EPA will seek to address air quality challenges presented by wildfires. Wildfire smoke can make up approximately 30 percent of total PM2.5 emissions in some regions of the U.S., aggravating heart and lung disease and causing premature death. In the FY 2023 Budget, EPA proposes additional \$12.7 million and 15.7 FTE to support work that will identify, predict, and communicate where smoke events are occuring, especially for overburdened and underserved communities where impact of wildfire issues has not been a priority.

The Agency will continue to develop and make available the necessary technical data and tools to support air quality planning and environmental justice analyses, such as AirNow, the Air Quality System, and the National Emissions Inventory. The Agency also will develop new and enhanced applications of environmental justice analytics to inform how power sector rules can mitigate impacts on overburdened communities. This effort will include modeling of power sector emissions down to the county level as well as improved representation of fine particulate matter that includes toxic heavy metals. EPA also will test, evaluate, and refine draft tools for incorporating environmental justice considerations into EPA-issued permits and ensure opportunities for meaningful public involvement in the permit process.

Objective 4.2: Reduce Exposure to Radiation and Improve Indoor Air – *Limit unnecessary radiation exposure and achieve healthier indoor air quality, especially for vulnerable populations.*

Objective 4.2, *Reduce Exposure to Radiation and Improve Indoor Air* is directly supported by the following long-term performance goal in the *FY 2022 – 2026 Strategic Plan*:

• By September 30, 2026, prevent 2,250 lung cancer deaths annually through lower radon exposure as compared to the FY 2020 baseline of 1,684 prevented lung cancer deaths.

To improve indoor air and reduce exposure to radiation, EPA leads programs that educate the public about radiation and indoor air quality concerns, including radon, asthma triggers, and poor ventilation. These programs promote public action to reduce potential risks in homes, schools, and workplaces. Because Americans spend most of their time indoors, where pollutant levels are often significantly higher than outdoors, poor indoor air is a major health concern. For example, radon is the second leading cause of lung cancer, responsible for 21,000 lung cancer deaths annually. As another example, nearly 24 million Americans have asthma. Low-income, communities of color suffer disproportionately from asthma. Indoor allergens and irritants play a significant role in making asthma worse and triggering asthma attacks. These concerns have been heightened during the past two years of the COVID pandemic, when people have had to spend more time indoors and the importance of effective ventilation has been emphasized. To better address these human

health risks from indoor air and radiation, \$125.3 million and 353 FTE are provided in the FY 2023 Budget.

In FY 2023, EPA will continue programs to reduce exposures to radon through home testing and mitigation, promote in-home asthma management, improve air quality in homes and schools, and build capacity for Tribes and communities across the country to comprehensively address indoor air risks.

To reduce the high public health risks from exposure to indoor radon, EPA will co-lead the National Radon Action Plan (NRAP), a multisector public-private coalition committed to eliminating avoidable radon-induced lung cancer in the United States and addressing radon as a health equity challenge. EPA will continue to provide State Indoor Radon Grant funding and technical assistance to Tribes and states, with a focus on increasing access to testing and mitigation in underserved communities.

In-home asthma management is a critical component of asthma care, particularly in low-income populations. EPA, in partnership with CDC and HUD through the Federal Asthma Disparities Action Plan, will support state Medicaid Programs and private health plans to pay for in-home asthma interventions through reimbursement mechanisms. In addition, EPA will reduce asthma disparities for low-income people and communities of color by supporting public health and housing organizations to train community health workers to deliver in-home asthma interventions and care. In FY 2023, EPA is measuring delivery of technical assistance, tools, and grant support to equip community-based programs and the organizations that support them to deliver evidence-based, comprehensive asthma care.

EPA will continue to reduce indoor air quality risks in schools through the Indoor Air Quality Tools for Schools Program. EPA will expand technical assistance to advance best indoor air quality practices through ventilation improvements, operation and preventive maintenance, and appropriate sanitation in school and childcare buildings. EPA also will update the Indoor airPLUS new home construction specifications and expand the program to address indoor air quality protections during home renovations and upgrades.

EPA will review and update the Federal Radiation Protection Guidance, currently based on protecting an adult male, to include protection for all members of the U.S. population, with particular emphasis on the most vulnerable. These updates will address considerations for all ages, both sexes, and the increased sensitivity of pregnant women and children to radiation exposure. In FY 2023, EPA will continue to streamline activities and fill gaps in the expertise that is critical for essential preparedness work, restoring critical capacity to meet EPA's core mission. EPA will maintain personnel expertise, capabilities, and equipment readiness of the radiological emergency response program under the National Response Framework and the National Contingency Plan, including the Agency's Radiological Emergency Response Team. EPA will provide oversight of the Waste Isolation Pilot Plant, including review of the Department of Energy's plans for additional waste panels and surplus plutonium disposal, to ensure safe long-term disposal of radioactive waste and the continued cleanup of nuclear weapons program legacy sites.

Environmental Protection Agency FY 2023 Annual Performance Plan and Congressional Justification

Ensure Clean and Safe Water for All Communities

Goal 5: Ensure Clean and Safe Water for All Communities—Provide clean and safe water for all communities and protect our nation's waterbodies from degradation.

STRATEGIC OBJECTIVES:

- Objective 5.1: Ensure Safe Drinking Water and Reliable Water Infrastructure—Protect public health from the risk of exposure to regulated and emerging contaminants in drinking and source waters by improving the reliability, accessibility, and resilience of the nation's water infrastructure to reduce the impacts of climate change, structural deterioration, and cyber threats.
- Objective 5.2: Protect and Restore Waterbodies and Watersheds—Address sources of water pollution and ensure water quality standards are protective of the health and needs of all people and ecosystems.

GOAL, OBJECTIVE SUMMARY

Budget Authority
Full-time Equivalents
(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Ensure Clean and Safe Water for All Communities	\$4,960,117	\$4,862,891	\$6,171,872	\$1,308,981
Ensure Safe Drinking Water and Reliable Water Infrastructure	\$3,679,606	\$3,497,574	\$4,588,445	\$1,090,870
Protect and Restore Waterbodies and Watersheds	\$1,280,510	\$1,365,317	\$1,583,428	\$218,111
Total Authorized Workyears	2,842.1	2,828.8	3,205.0	376.2

Goal 5: Ensure Clean and Safe Water for All Communities

Provide clean and safe water for all communities and protect our Nation's waterbodies from degradation.

Introduction

Clean and safe water is a vital resource essential to the protection of human health and is a foundation for supporting healthy communities and a thriving economy. EPA is committed to ensuring clean and safe water for all, especially for overburdened and underserved communities where adequate drinking and wastewater infrastructure has not been a priority. Great progress has been made in the past 50 years protecting and restoring water resources through legislation such as the Clean Water Act (CWA), Safe Drinking Water Act (SDWA), and Marine Protection, Research and Sanctuaries Act (MPRSA). As of January 2022, nearly 93 percent of the population served by community water systems receives water that meets all applicable health-based drinking water standards. However, the Nation still faces significant barriers and challenges such as equity in access to safe and clean water, aging infrastructure, legacy lead pipes, cybersecurity threats, water pollution, climate change, and emerging contaminants of concern. These challenges are distributed unequally, and tens of thousands of homes, primarily in Tribal communities and the territories, lack access to basic sanitation and drinking water and experience higher pollution levels.

In FY 2023, EPA will continue to work with its federal, Tribal, state, and nongovernmental partners to advance science, to provide clean and safe water for all communities, and to protect our Nation's waterbodies from degradation. The FY 2023 Budget includes \$6.172 billion and 3,205 FTE for *Goal 5, Ensure Clean and Safe Water for All Communities*. This investment will complement resources provided in a recently enacted bipartisan Infrastructure Investment and Jobs Act of 2021 (IIJA) and expand the Agency's capacity to protect human health and the environment across the Nation.

Goal 5, Ensure Clean and Safe Water for All Communities is directly supported by the following FY 2022 – 2023 Agency Priority Goal:

• Clean up contaminated sites and invest in water infrastructure to enhance the livability and economic vitality of overburdened and underserved communities. By September 30, 2023, EPA will provide technical assistance to at least 10 communities to help achieve clean and safe water and reduced exposures to hazardous substances. 40

Objective 5.1: Ensure Safe Drinking Water and Reliable Water Infrastructure – Protect public health from the risk of exposure to regulated and emerging contaminants in drinking and source waters by improving the reliability, accessibility, and resilience of the Nation's water infrastructure to reduce the impacts of climate change, structural deterioration, and cyber threats.

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⁴⁰ This APG is implemented jointly with Goal 6.

Objective 5.1, *Ensure Safe Drinking Water and Reliable Water Infrastructure* is directly supported by the following long-term performance goals in the *FY 2022 – 2026 EPA Strategic Plan:*

- By September 30, 2026, reduce the number of community water systems still in noncompliance with health-based standards since March 31, 2021, from 752 to 500.⁴¹
- By September 30, 2026, reduce the number of community water systems in Indian Country still in noncompliance with health-based standards since March 31, 2021, from 110 to 70.
- By September 30, 2026, leverage an additional \$45 billion in non-federal dollars through EPA's water infrastructure finance programs (CWSRF, DWSRF, and WIFIA). 42
- By September 30, 2026, in coordination with other federal agencies, provide access to basic sanitation for an additional 36,500 American Indian and Alaska Native homes.
- By September 30, 2026, provide 2,203 Tribal, small, rural, or underserved communities with technical, managerial, or financial assistance to improve operations of their drinking water or wastewater systems.

Safe and Reliable Water

Providing safe and reliable drinking and wastewater for all communities is a priority for EPA. While significant progress has been made over the last 50 years, aging infrastructure, climate change, cyber threats, and contaminants such as lead and per- and polyfluoroalkyl substances (PFAS) in drinking water are creating new stresses on the Nation's water systems. In FY 2023, EPA will work to address these challenges through approximately \$4 billion in water infrastructure spending. This includes \$1.639 billion for the Clean Water State Revolving Fund (CWSRF) Program, \$1.126 billion for the Drinking Water State Revolving Fund (DWSRF) Program, and \$80.3 million for the Water Infrastructure Finance and Innovation Act (WIFIA) Program. Also included is \$1.2 billion for grant programs authorized in the America's Water Infrastructure Act (AWIA) of 2018, the Water Infrastructure Improvements for the Nation Act of 2016 (WIIN), and the Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA). In addition, working collaboratively, EPA and the SRF Programs can make progress toward Justice 40, which aims to ensure that federal agencies deliver at least 40 percent of overall benefits of relevant federal investments to overburdened and underserved communities. As of February 2022, EPA has closed 72 WIFIA loans totaling over \$13 billion in credit assistance to help finance more than \$28 billion for water infrastructure projects. In FY 2023, EPA will use the SRF and WIFIA investments to improve the reliability, accessibility, and resilience of the Nation's water infrastructure. These programs are critical tools for EPA to accelerate water infrastructure investments by leveraging public and private sources of funds, which will maximize the reach of federal funds.

⁴¹ This baseline is a subset of the 3,508 systems, including systems in Indian country, that have been in long-term noncompliance since September 30, 2017. Technical assistance provided will focus on non-compliant water systems in underserved communities.

⁴² The Agency will ensure a focus on climate resiliency and equity by revising loan guidelines, program guidance, and providing technical assistance.

In FY 2023, EPA requests \$140.0 million and 547.2 FTE to support Drinking Water Programs to better protect communities, especially overburdened and underserved communities. This includes efforts to reduce exposure to lead in drinking water by developing a new Lead and Copper Rule Improvements regulation. Resources also will support reducing public health and environmental threats from PFAS by proposing new drinking water standards. The Agency also will continue to support and upgrade management and reporting tools of the Safe Drinking Water Information System (SDWIS), which contains information about public water systems and their violations of EPA's drinking water regulations. EPA also will continue to coordinate and support protection of the Nation's critical water infrastructure from terrorist threats and all-hazard events.

Cyberattacks can compromise the ability of water and wastewater utilities to provide clean and safe water to customers, erode customer confidence, and result in financial and legal liabilities. In FY 2023, EPA will leverage its role as the lead federal agency for cybersecurity in the water sector, working with government partners to close vulnerabilities and mitigate risks to cyberthreats. EPA requests \$25 million to create a new grant program that helps water systems establish and build the necessary cybersecurity infrastructure to address rising threats.

The IIJA of 2021 included DWWIA, which authorized a suite of water programs to help address numerous drinking water and wastewater issues across the country. Implementation of DWWIA will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities. In FY 2023, EPA's request would fully fund new and existing grant programs authorized by DWWIA in support of Objective 5.1.

Objective 5.2 Protect and Restore Waterbodies and Watersheds – Address sources of water pollution and ensure water quality standards are protective of the health and needs of all people and ecosystems.

The FY 2023 Budget includes \$1.6 billion and 1,806 FTE for Objective 5.2.

Objective 5.2, *Protect and Restore Waterbodies and Watersheds* is directly supported by the following long-term performance goal in the FY 2022 – 2026 EPA Strategic Plan:

• By September 30, 2026, increase by 41,000 square miles the area of watersheds with surface water meeting standards that previously did not meet standards. 43

Clean Waterbodies and Watersheds

Pollution and degradation of lakes, rivers, streams, and wetlands endanger aquatic ecosystems, threaten the safety of drinking water, compromise water quality planning and flood protections, impact commercial and recreational opportunities, and reduce the natural benefits these resources

⁴³ Draft July 2021 baseline: 425,198 square miles of watersheds with surface water meeting standards and 652,609 square miles of watersheds with surface water not meeting standards. Final baseline will be available the second half of FY 2022.

provide to communities. Climate change is often the root cause of emerging threats such as drought, sea level rise, and invasive species proliferation. To address these challenges, in FY 2023, EPA will use a suite of CWA core programs to protect and improve water quality and ecosystem health, including the development and implementation of Total Maximum Daily Loads (TMDLs), alternative restoration plans, or other protection approaches for impaired waterbodies; development of technology-based and water-quality based standards; and implementation of effluent or stormwater discharge permit programs.

In addition to strengthening its programs, EPA plans to promulgate and update several rules to support clean and safe water. The Agency also will produce effluent limitation guidelines for chemical manufacturers and metal finishing companies to address PFAS, for steam electric power generators to address toxics and other pollutants, and for meat and poultry products to address nutrient discharges. The Agency will review rules related to improving CWA protections on Tribal reservations and consider Tribal treaty rights when acting on state Water Quality Standards (WQS) that impact those rights.

EPA also will work collaboratively with public and private sector stakeholders to establish innovative, location-appropriate programs to protect and improve water quality. Additionally, in FY 2023, EPA's requests fully funds new grant programs authorized by DWWIA in support of Objective 5.2.

Ensuring clean water through partnerships, including with Tribes and states

EPA will work with partners and local communities to better safeguard human health and maintain, restore, and improve water quality. In FY 2023, EPA requests \$465.4 million for ongoing categorical grants that support Tribal and state implementation of the CWA.

In FY 2023, funding will support the Agency's work assisting local communities, particularly underserved communities, in their efforts to restore and protect the quality of their waters through programs like the Urban Waters Program. The Marine Pollution Program aims to reduce litter in our waterways and communities and improve trash capture activities across the country.

EPA plays an important role as a convener and facilitator with federal, Tribal, state, and local partners to align resources and authorities within regional, watershed, and basin-scaled collaborative networks. In FY 2023, EPA will invest \$578.6 million and 139.2 FTE in Geographic Programs to maintain, restore, and improve water quality for all communities to enjoy. More specifically, EPA's Geographic Programs will deliver technical and financial assistance to solve problems and support healthy climate resilient ecosystems that address water quality, water infrastructure, nutrient pollution, habitat loss, treaty rights, equity, and environmental justice.

Environmental Protection Agency FY 2023 Annual Performance Plan and Congressional Justification

Safeguard and Revitalize Communities

Goal 6: Safeguard and Revitalize Communities—Restore land to safe and productive uses to improve communities and protect public health.

STRATEGIC OBJECTIVES:

- Objective 6.1: Clean Up and Restore Land for Productive Uses and Healthy Communities—Clean up and restore contaminated sites to protect human health and the environment and build vibrant communities, especially in underserved and overburdened areas.
- Objective 6.2: Reduce Waste and Prevent Environmental Contamination—Prevent environmental pollution by preventing releases, reducing waste, increasing materials recovery and recycling, and ensuring sustainable materials management practices.
- Objective 6.3: Prepare for and Respond to Environmental Emergencies—Prevent, prepare, and respond to environmental emergencies and support other agencies on nationally significant incidents, working with Tribes, states, and local planning and response organizations.

GOAL, OBJECTIVE SUMMARY

Budget Authority
Full-time Equivalents
(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Safeguard and Revitalize Communities	\$1,900,731	\$1,788,656	\$1,836,960	\$48,304
Clean Up and Restore Land for Productive Uses and Healthy Communities	\$1,406,085	\$1,290,591	\$1,260,347	-\$30,243
Reduce Waste and Prevent Environmental Contamination	\$300,165	\$290,314	\$326,746	\$36,432
Prepare for and Respond to Environmental Emergencies	\$194,481	\$207,751	\$249,867	\$42,116
Total Authorized Workyears	3,385.8	3,337.5	3,558.1	220.7

Goal 6: Safeguard and Revitalize Communities

Restore land to safe and productive uses to improve communities and protect public health.

Introduction

The EPA's mission is to protect human health and the environment. EPA collaborates with Tribal, state, and local partners to improve the livelihood of all residents of the United States by cleaning up and returning contaminated sites, including Superfund, brownfields, underground storage tanks, and other waste sites, to productive use. Cleaning up contaminated land reduces the negative environmental and health effects for neighboring communities and contributes toward the Administration's Justice40 goal. EPA and its partners also work to prevent releases of contaminants, reduce waste by increasing materials recovery and recycling, and support sustainable materials management practices. Through prevention activities, EPA protects groundwater from releases from underground storage tanks. Through reduction and recycling activities, EPA not only prevents future contamination through diversion but supports a less wasteful circular economy. Additionally, EPA prepares for and responds to environmental emergencies as a mission essential function. In FY 2023, EPA requests a total of \$1.837 billion and 3,558.1 FTE for *Goal 6, Safeguard and Revitalize Communities*.

Goal 6, Safeguard and Revitalize Communities is directly supported by the following FY 2022 – 2023 Agency Priority Goal:

• Clean up contaminated sites and invest in water infrastructure to enhance the livability and economic vitality of overburdened and underserved communities. By September 30, 2023, EPA will provide technical assistance to at least 10 communities to help achieve clean and safe water and reduced exposures to hazardous substances. 44

Objective 6.1: Clean Up and Restore Land for Productive Uses and Healthy Communities – Clean up and restore contaminated sites to protect human health and the environment and build vibrant communities, especially in underserved and overburdened areas.

Objective 6.1, Clean Up and Restore Land for Productive Uses and Healthy Communities is directly supported by the following long-term performance goals in the FY 2022 – 2026 EPA Strategic Plan:

- By September 30, 2026, bring human exposures under control at an additional 60 Superfund sites.
- By September 30, 2026, complete 225 Superfund cleanup projects that address lead as a contaminant.
- By September 30, 2026, clean up an additional 650 brownfields properties.

⁴⁴ This APG is implemented jointly with Goal 5.

- By September 30, 2026, make an additional 425 RCRA corrective action cleanups Ready for Anticipated Use.
- By September 30, 2026, conduct an additional 35,000 cleanups at Leaking Underground Storage Tank facilities.

Nationally, there are thousands of contaminated sites with challenging and complex environmental problems, including soil, sediment, and groundwater contaminated by chemicals such as per- and polyfluoroalkyl substances (PFAS). While there is no single way to characterize communities located near contaminated sites, the legacy of pollution disproportionally affects communities of color, low-income communities, linguistically isolated populations, and those without a high school education. By cleaning up and returning contaminated land to productive use, EPA and its partners will reduce the environmental and health effects of exposure to contamination in communities, especially underserved and overburdened communities. In the FY 2023 Budget, EPA requests \$1.260 billion and 2,273.7 FTE for Objective 6.1 to Clean Up and Restore Land for Productive Uses and Healthy Communities.

In FY 2023, EPA will use appropriated funding to continue critical Superfund pre-construction work such as site characterization, construction design, and community outreach/engagement, which supports the Administration's Justice40 Initiative. This work will complement resources received through the Infrastructure Investment and Jobs Act of 2021 (IIJA). Nationwide, EPA will aim to control human exposures at 12 additional Superfund sites supporting the 2022-2026 long-term performance goal of 60 sites. To reduce exposure to lead and associated health impacts, EPA will complete at least 45 Superfund lead cleanup projects supporting the 2022-2026 long-term performance goal of 225 projects. The FY 2023 Budget reduces funding for the Superfund Remedial program below the current level; however, the \$454.6 million provided in the FY 2023 Budget will be supplemented by available Superfund tax revenue that begins to be collected in FY 2022.

In the FY 2023 Budget, EPA requests \$199.8 million and 250.7 FTE for the Superfund Emergency Response and Removal Program. Situations requiring emergency response and removal actions vary greatly in size, nature, and location, and include chemical releases, fires or explosions, natural disasters, and other threats to people from exposure to hazardous substances. EPA's 24-hour-aday response capability is a cornerstone element of the National Contingency Plan. Funding for this Program includes a total investment of \$3 million and 6 FTE to advance cleanup through removal actions at Navajo Nation abandoned uranium mine sites. These additional resources will assist EPA and Navajo Nation to accelerate actions laid out in the 2020 Ten-Year Plan: Federal Actions to Address Impacts of Uranium Contamination on the Navajo Nation.

EPA will continue to oversee cleanups at Federal Facility Superfund sites and will work to keep pace with the growing number of PFAS cleanups at Department of Defense (DoD), Department of Energy and other federal agency sites. EPA is currently engaged at 96 Federal Facility National Priority List (NPL) sites with PFAS detections, ensuring consistent and protective responses, and

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⁴⁵ For more information, please refer to: https://www.epa.gov/emergency-response/national-oil-and-hazardous-substances-pollution-contingency-plan-nep-overview.

⁴⁶ https://www.epa.gov/sites/default/files/2021-02/documents/nnaum-ten-year-plan-2021-01.pdf

DoD is expected to initiate approximately 50 additional PFAS investigations in FY 2023. The Agency will leverage knowledge and best practices developed from Federal Facilities PFAS investigations to aid PFAS cleanups across the country. The FY 2023 Budget Request includes a total investment of \$13.7 million and 3 FTE to enhance EPA's ability to oversee DoD PFAS cleanup under CERCLA and to restore capacity in EPA's Federal Facility Restoration and Reuse Program.

EPA will continue efforts to clean up 3,924 priority contaminated hazardous waste facilities (the Corrective Action Progress Track) under RCRA, which include highly contaminated and technically challenging sites, and assess others to determine whether cleanups are necessary. As of the end of FY 2021, only 40 percent of these facilities have completed final and permanent cleanups, leaving approximately 2,300 facilities still needing oversight and technical support to reach final site-wide cleanup objectives. In FY 2021, EPA approved 146 RCRA corrective action facilities as ready for anticipated use (RAU), bringing the total number of RCRA RAU facilities to 1,789. In FY 2023, EPA will make an additional 100 sites RAU supporting the FY 2022-2026 long-term performance goal of making 425 sites RAU.

Under the Leaking Underground Storage Tank (LUST) Program, EPA provides funding to states to address releases, including in groundwater,⁴⁷ to ensure that petroleum contamination is properly assessed and cleaned up. EPA collaborates with states to develop and implement flexible, state-driven strategies to reduce the number of remaining LUST sites that have not reached cleanup completion. Through the cooperative efforts between EPA and states, the backlog was reduced by approximately 40 percent between the end of 2008 and the end of 2021 (from 102,798 to 61,981).⁴⁸

In FY 2023, funding for EPA's Brownfields Program will build on current work to revitalize communities, especially those that are historically overburdened and underserved, by providing financial and technical assistance to assess, clean up, and plan reuse at brownfields sites. In FY 2021, EPA leveraged \$2.1 billion in cleanup and redevelopment funds and made 616 additional brownfields sites RAU. The FY 2023 Budget Request includes an investment of \$11.9 million and 60 FTE for community development specialists to manage land revitalization projects, provide one-on-one financial planning support, and educate Tribal communities, rural communities and communities with environmental justice concerns on how to address brownfields. Activities undertaken in FY 2023 will leverage approximately 13,400 jobs and \$2.6 billion in other funding sources.⁴⁹

Objective 6.2: Reduce Waste and Prevent Environmental Contamination — Prevent environmental pollution by preventing releases, reducing waste, increasing materials recovery, and recycling, and ensuring sustainable materials management practices.

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⁴⁷ Almost half of the Nation's overall population and 99 percent of the population in rural areas rely on groundwater for drinking water. (See *EPA 2000 Water Quality Inventory Report*, https://archive.epa.gov/water/archive/web/html/2000report_index.html).

⁴⁸ Please see EPA website: http://www.epa.gov/ust/ust-performance-measures.

⁴⁹ U.S. EPA, Office of Land and Emergency Management Estimate. All estimates of outputs and outcomes are supported by the data that is entered by cooperative agreement recipients via EPA's ACRES database.

Objective 6.2, *Reduce Waste and Prevent Environmental Contamination* is directly supported by the following long-term performance goal in the *FY 2022 – 2026 EPA Strategic Plan*:

• By September 30, 2026, increase the percentage of updated permits at RCRA facilities to 80% from the FY 2021 baseline of 72.7%.

Nationwide, EPA and its state partners strive to reach all permitting-related decisions in a timely manner for the approximately 6,700 hazardous waste units (e.g., incinerators, landfills, and tanks) located at 1,300 treatment, storage, and disposal permit facilities. The goal is to ensure that permits reflect the latest technology and standards and remain protective under changing conditions, such as climate change, and that communities, including those that are underserved and overburdened, have an equitable opportunity to engage in the permitting process over time. To measure progress, EPA has set an FY 2023 target of 100 permit renewals at hazardous waste facilities supporting the FY 2022-2026 long-term performance goal. In FY 2023, \$326.7 million and 650.8 FTE are provided for Objective 6.2 to *Reduce Waste and Prevent Environmental Contamination*.

The FY 2023 Budget Request includes an additional \$7 million and 28 FTE to build capacity to implement various aspects of the coal combustion residuals (CCR) program. The Agency has promulgated regulations specifying improved management and disposal practices to ensure people and ecosystems are protected. The Agency will continue to work with our stakeholders as we implement these regulations. Additional regulations will be developed to expand the CCR regulations to cover 'legacy' units which are not covered by existing regulations. EPA will continue establishing a federal permit program and work with states that wish to establish state CCR permit programs.

Through its National Recycling Strategy,⁵⁰ EPA is working to develop a stronger, more resilient, and cost-effective U.S. municipal solid waste recycling system. Recycling is an important part of a circular economy, which refers to a system of activities that is restorative to the environment, enables resources to maintain their highest values, designs out waste, and reduces greenhouse gas emissions. Recycling helps alleviate burdens on populations that bear the brunt of poorly run waste management facilities. In FY 2023, EPA will focus on efforts to strengthen the U.S. recycling system, address the global issue of plastic waste, engage communities, and prevent and reduce food loss and waste. EPA will work with industry, Tribes, state and local governments, non-profits, communities, and other stakeholders to implement the voluntary actions identified in the National Recycling Strategy and identify additional actions needed to support a circular economy.

To protect groundwater from releases of petroleum from underground storage tanks (UST), EPA works with its Tribal and state partners on prevention. Major FY 2023 activities include inspecting UST facilities to meet the three-year inspection requirement and assisting states in adopting prevention measures such as delivery prohibition, secondary containment, and operator training. EPA also will establish a targeted, national program to improve the compatibility of UST systems with higher blends of ethanol, including E15, in fenceline communities. These activities emphasize bringing UST systems into compliance with release detection and release prevention requirements and minimizing future releases. Due to the increased emphasis on inspections and release

⁵⁰ The National Recycling Strategy is at: https://www.epa.gov/system/files/documents/2021-11/final-national-recycling-strategy.pdf.

prevention requirements, the number of confirmed releases has decreased from 6,847 in FY 2014 to 4,991 reported releases in FY 2021.

Objective 6.3: Prepare for and Respond to Environmental Emergencies – *Prevent, prepare, and respond to environmental emergencies and support other agencies on nationally significant incidents, working with Tribes, states, and local planning and response organizations.*

Objective 6.3, *Prepare for and Respond to Environmental Emergencies*, is directly supported by the following long-term performance goal in the *FY 2022 – 2026 EPA Strategic Plan*:

• By September 30, 2026, ensure that 40% of annual emergency response and removal exercises that EPA conducts or participates in incorporate environmental justice.

Environmental emergencies are growing in frequency and the risks they pose are increasing. EPA strives to prevent such emergencies and be ready to respond to those that occur through the Agency's planning and preparedness efforts, in coordination with and through the support of partner organizations. EPA develops regulations and policies that aim to prevent environmental emergencies and enhance the ability of communities and facilities to prepare for and respond to emergencies that occur. EPA also prepares for the possibility of significant incidents by maintaining a trained corps of federal On-Scene Coordinators, Special Teams, and Response Support Corps, and by providing guidance and technical assistance to Tribal, state, and local planning and response organizations to strengthen their preparedness. EPA carries out its responsibility under multiple statutory authorities and the National Response Framework, which provides the comprehensive federal structure for managing national emergencies. The FY 2023 Budget Request includes \$249.9 million and 633.6 FTE for Objective 6.3 to *Prepare for and Respond to Environmental Emergencies*.

In FY 2023, EPA will continue to chair the U.S. National Response Team⁵¹ and co-chair the 13 Regional Response Teams, which serve as multi-agency coordination groups supporting emergency responders when convened as incident specific teams. EPA will participate in the development of limited, scenario-specific exercises and regional drills designed to assess national emergency response management capabilities. To measure progress, EPA has set an FY 2023 target of 21 percent for emergency response and removal exercises that EPA conducts or participates in that incorporate environmental justice concerns. For example, EPA may include entities with environmental justice concerns in the exercise or incorporate environmental justice issues into the exercise scenarios, if it's not feasible to include participants. This supports the 2022-2026 long-term performance goal of 40 percent.

EPA will inspect chemical facilities to prevent accidental releases. The FY 2023 Budget Request includes \$22.9 million and 93.1 FTE for this Program, including a total investment of \$8.1 million and 30 FTE to protect fenceline communities. The objective is to ensure compliance with accident prevention and preparedness regulations and to work with chemical facilities to reduce chemical risks and improve safety to populations, especially in fenceline communities. There are approximately 12,000 chemical facilities that are subject to the Risk Management Plan (RMP) regulations. Of these, approximately 1,800 facilities have been designated as high-risk based upon

⁵¹ For additional information, please refer to: https://www.nrt.org/.

their accident history, quantity of on-site dangerous chemicals stored, and proximity to large residential populations. 52 EPA prioritizes inspections at high-risk facilities. Using the additional funding and FTE provided for FY 2023, EPA will increase inspections and compliance assistance at RMP and Emergency Planning and Community Right-to-Know Act (EPCRA)-regulated facilities, checking measures to prevent chemical accidents. EPA will focus on high-risk facilities located in communities with EJ concerns and communities with increased climate-related risks (e.g., extreme weather, flooding, wildfires). In addition, EPA is developing a regulatory action to revise the RMP regulations. The proposed rule would address the administration's priorities, including consideration of communities with environmental justice concerns and those vulnerable to climate risks, and focus on regulatory revisions completed since 2017. The proposed rule would also consider stakeholder feedback received from RMP public listening sessions held in 2021.

In FY 2023, EPA will inspect oil facilities to ensure compliance with prevention and preparedness requirements. Inspections involve reviewing the facility's prevention, preparedness, and response plans and discussing key aspects of these plans with facility staff. EPA will increase inspections, enforcement, and compliance assistance at regulated facilities, focusing on high-risk facilities located in communities with EJ concerns and communities with increased climate-related risks. EPA also will conduct unannounced exercises at facilities subject to Facility Response Plan regulations, a subset of facilities identified as high risk due to their size and location, to test the facility owner's ability to put preparedness and response plans into action. To advance this work in FY 2023, \$20.5 million and 85.6 FTE, including a total of \$3.8 million and 15 FTE to protect fenceline communities, are provided within the Budget.

⁵² Located in the EPA RMP database.

Environmental Protection Agency FY 2023 Annual Performance Plan and Congressional Justification

Ensure Safety of Chemicals for People and the Environment

Goal 7: Ensure Safety of Chemicals for People and the Environment—Increase the safety of chemicals and pesticides and prevent pollution at the source.

STRATEGIC OBJECTIVES:

- Objective 7.1: Ensure Chemical and Pesticide Safety—Protect the health of families, communities, and ecosystems from the risks posed by chemicals and pesticides.
- Objective 7.2: Promote Pollution Prevention—Encourage the adoption of pollution prevention and other stewardship practices that conserve natural resources, mitigate climate change, and promote environmental sustainability.

GOAL, OBJECTIVE SUMMARY

Budget Authority Full-time Equivalents (Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Ensure Safety of Chemicals for People and the Environment	\$388,626	\$399,652	\$517,332	\$117,679
Ensure Chemical and Pesticide Safety	\$313,770	\$319,009	\$424,394	\$105,385
Promote Pollution Prevention	\$74,856	\$80,644	\$92,938	\$12,294
Total Authorized Workyears	1,665.9	1,629.7	1,908.7	279.0

Goal 7: Ensure Safety of Chemicals for People and the Environment

Increase the safety of chemicals and pesticides and prevent pollution at the source.

Introduction

EPA is responsible for ensuring the safety of chemicals and pesticides for people at all life stages and the environment, improving access to chemical safety information, and preventing pollution at the source before it occurs. The Agency focuses on assessing, preventing, and reducing releases and exposures resulting from the manufacture, processing, use, and disposal of chemicals and pesticides and advances the community's right-to-know about these releases and exposures. EPA works to protect the most vulnerable populations from unsafe exposures, especially children, the elderly, and those with environmental justice concerns (including low-income, minority and indigenous populations) who may already be disproportionately harmed by and at risk from other stressors. In addition, EPA works to ensure public access to chemical and pesticide data, analytical tools, and other sources of information and expertise, and promotes source reduction, integrated pest management, and other pollution prevention strategies by organizations and businesses. In total, the FY 2023 Budget includes \$517.3 million and 1,908.7 FTE for *Goal 7: Ensure Safety of Chemicals for People and the Environment*.

In FY 2023, EPA's activities under this goal, as described below, will focus on evaluating/assessing and managing risks from exposure to new and existing industrial chemicals; continuing to address lead-based paint risks; reviewing and registering new pesticides and new uses for existing pesticides; reducing occupational exposure to pesticides, particularly in communities with environmental justice concerns; and addressing potential risks to threatened and endangered species from pesticides. In addition, EPA will continue working with Tribes, state agencies, industry, and communities to implement voluntary efforts to prevent pollution at the source and continue to publish Toxics Release Inventory (TRI) data on chemical releases from industrial facilities for public review and use.

Objective 7.1: Ensure Chemical and Pesticide Safety – Protect the health of families, communities, and ecosystems from the risks posed by chemicals and pesticides.

The FY 2023 Budget includes \$424.4 million and 1,652.5 FTE for Objective 7.1.

Objective 7.1, *Ensure Chemical and Pesticide Safety* is directly supported by the following long-term performance goals in the *FY 2022 – 2026 EPA Strategic Plan*:

- By September 30, 2026, complete at least eight High Priority Substance (HPS) TSCA risk evaluations annually within statutory timelines compared to the FY 2020 baseline of one.
- By September 30, 2026, initiate all TSCA risk management actions within 45 days of the completion of a final existing chemical risk evaluation.
- By September 30, 2026, review 90% of risk mitigation requirements for past TSCA new chemical substances decisions compared to the FY 2021 baseline of none.

- By September 30, 2026, recertify before the expiration date 36% of lead-based paint Renovation, Repair, and Painting (RRP) firms whose certifications are scheduled to expire compared to the FY 2021 baseline of 32%.
- By September 30, 2026, complete 78 pesticide registration review cases with statutory due dates that fall after October 1, 2022.
- By September 30, 2026, consider the effects determinations or protections of federally threatened and endangered species for new active ingredients in 90% of the risk assessments supporting pesticide registration decisions for new active ingredients compared to the FY 2020 baseline of 50%.
- By September 30, 2026, consider the effects determinations or protections of federally threatened and endangered species in 50% of the risk assessments supporting pesticide registration review decisions compared to the FY 2020 baseline of 27%.
- By September 30, 2026, support Agricultural Worker Protection Standard (WPS) pesticide safety training for 20,000 farmworkers annually compared to the FY 2018-2020 annual average baseline of 11,000.

Toxic Substances Control Act (TSCA)

Under Section 5 of TSCA, EPA is responsible for reviewing all new chemical submissions before they enter commerce to determine whether the chemicals may pose unreasonable risks to human health or the environment.⁵³ EPA will conduct risk assessments and make affirmative determinations on risks for more than 500 new chemical notice and exemption submissions annually. EPA also will continue to reduce exposures to lead in paint by establishing standards for inspection, risk assessment, and abatement of lead-based paint hazards, along with training and certification programs, among other efforts.

Under TSCA Section 6,54 EPA has responsibility for prioritizing and evaluating at least 20 existing chemicals at a time, assessing additional chemicals at manufacturers' request, and managing identified unreasonable risks. In FY 2023, EPA will continue developing draft and final risk evaluations for High-Priority Chemicals and will develop risk management actions in response to unreasonable human health and environmental risks identified in the risk evaluations.

Lead-Based Paint (LBP) Risk Reduction

Also under TSCA, EPA's Lead-Based Paint Risk Reduction Program contributes to the goal of reducing lead exposure and works toward addressing historic and persistent disproportional

⁵³ Actions under TSCA Section 5: https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/actions-

under-tsca-section-5.

54 Regulation of Chemicals under Section 6(a) of the Toxic Substances Control Act: <a href="https://www.epa.gov/assessing-and-managing-and chemicals-under-tsca/regulation-chemicals-under-section-6a-toxic-substances.

vulnerabilities of certain communities.⁵⁵ ⁵⁶ In FY 2023, EPA will continue to reduce exposure to lead in paint and dust by establishing standards governing lead hazard identification and abatement practices; establishing and maintaining a national pool of certified firms and individuals; and providing information and outreach to housing occupants and the public so they can make informed decisions and take actions on lead hazards in their homes.

Pesticide Programs

In FY 2023, consistent with statutory responsibilities,⁵⁷ ⁵⁸ ⁵⁹ EPA will continue to review and register new pesticides and new uses for existing pesticides, and other covered applications under the Pesticide Registration Improvement Extension Act (PRIA). EPA also will act on other registration requests in accordance with Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and Federal Food, Drug, and Cosmetic Act (FFDCA) standards. Many of these registration actions will be for reduced-risk conventional pesticides and biopesticides, which, once registered and used by consumers, will increase benefits to society, including infants and children, and reduce ecological impacts. Additionally, in FY 2023, EPA will continue to reevaluate existing chemicals in the marketplace on a 15-year cycle to ensure the FIFRA standard for registration continues to be met based on current science.

The Agricultural Worker Protection Standard (WPS)⁶⁰ and the Certification of Pesticide Applicators (CPA)⁶¹ revised rules (finalized in FY 2015 and FY 2017, respectively) are key elements of EPA's strategy for reducing occupational exposure to pesticides. In FY 2023, EPA will continue to support the implementation of the regulations through education and outreach, guidance development, and grant programs, with a particular focus on environmental justice issues in rural communities and the health of farmworkers and their families.

Under the Endangered Species Act (ESA),⁶² EPA is responsible for ensuring that pesticide regulatory decisions will not destroy or adversely modify designated critical habitat or jeopardize

⁵⁵ Childhood blood lead levels (BLL) have declined substantially since the 1970s, due largely to the phasing out of lead in gasoline and to the reduction in the number of homes with lead-based paint hazards. The median concentration of lead in the blood of children aged 1 to 5 years dropped from 15 micrograms per deciliter in 1976–1980 to 0.7 micrograms per deciliter in 2013–2014, a decrease of 95%. *See*, America's Children and the Environment (*EPA*, 2019), found at: https://www.epa.gov/americaschildrenenvironment.

⁵⁶ Among children ages 1 to 5 years in families with incomes below poverty level, the 95th percentile blood lead level (BLL) was 3.0 μg/dL, and among those in families at or above the poverty level, it was 2.1 μg/dL, a difference that was statistically significant. The 95th percentile BLL among all children ages 1 to 5 years was 2.5 μg/dL. The 95th percentile BLL in Black non-Hispanic children ages 1 to 5 years was 3.0 μg/dL, compared with 2.4 μg/dL for White non-Hispanic children, 1.8 μg/dL for Mexican-American children, and 2.7 μg/dL for children of "All Other Races/Ethnicities." The differences in 95th percentile BLL between

race/ethnicity groups were all statistically significant, after accounting for differences by age, sex, and income. <u>See</u>, America's Children and the Environment (EPA, 2019), found at: https://www.epa.gov/americaschildrenenvironment.

⁵⁷ Summary of Federal Insecticide, Fungicide, and Rodenticide Act: https://www.epa.gov/laws-regulations/summary-federal-insecticide-and-rodenticide-act.

⁵⁸ Summary of the Federal Food, Drug, and Cosmetic Act: https://www.epa.gov/laws-regulations/summary-federal-food-drug-and-cosmetic-act.

⁵⁹ Pesticide Registration Improvement Extension Act of 2018 (PRIA 4): https://www.epa.gov/pria-fees.

⁶⁰ Agricultural Worker Protection Standard: https://www.epa.gov/pesticide-worker-safety/agricultural-worker-protection-standard-wps.

⁶¹ Revised Certification Standards for Pesticide Applicators: https://www.epa.gov/pesticide-worker-safety/revised-certification-standards-pesticide-applicators.

⁶² For additional information on the Endangered Species Protection Program, see: https://www.epa.gov/endangered-species/about-endangered-species-protection-program.

the continued existence of species listed as threatened or endangered by the U.S. Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS). In FY 2023, EPA will assess in its FIFRA registration and registration review regulatory determinations whether listed endangered or threatened species or their designated critical habitat may be affected. Where risks are identified in a biological evaluation, EPA will work with FWS and NMFS through a consultation⁶³ process to ensure these new or existing pesticide registrations also will meet the ESA standard.⁶⁴ In FY 2023, EPA also will continue to develop processes to protect listed species earlier in the regulatory and consultation processes and pursue other major improvements to its ESA compliance work in coordination with the Services.

Objective 7.2: Promote Pollution Prevention – Encourage the adoption of pollution prevention and other stewardship practices that conserve natural resources, mitigate climate change, and promote environmental sustainability.

The FY 2023 Budget includes \$92.9 million and 256.2 FTE for Objective 7.2.

Objective 7.2, *Promote Pollution Prevention* is directly supported by the following long-term performance goals in the FY 2022 – 2026 EPA Strategic Plan:

- By September 30, 2026, reduce a total of 6 million metric tons of carbon dioxide equivalent (MMTCO₂e) released attributed to EPA pollution prevention grants.
- By September 30, 2026, EPA's Safer Choice Program will certify a total of 2,300 products compared to the FY 2021 baseline of 1,950 total certified products.

Pollution Prevention

EPA's implementation of the Pollution Prevention (P2) Program under the Pollution Prevention Act of 1990⁶⁵ is one of EPA's primary tools for advancing environmental stewardship and sustainability by federal, Tribal, and state governments, businesses, communities, and individuals. These practices focus on reducing the amount of any hazardous substance, pollutant, or contaminant entering a waste stream or released into the environment prior to recycling of discarded material, treatment, or disposal, as well as conserving the use of natural resources. P2 grants – a key element of the P2 Program – contributed to the elimination of 16.9 million metric tons of greenhouse gases between 2011 and 2019⁶⁶. In FY 2023, EPA will continue its work to prevent pollution at the source by awarding targeted P2 grants to Tribes, states, and local governments, encouraging the use of products certified by EPA as safer for the environment, encouraging federal procurement of environmentally preferable products, and enhancing the use of Toxics Release Inventory (TRI) data to help prevent pollution and support the Administration's environmental justice priorities.

⁶³ For additional information, see: https://www.epa.gov/endangered-species/assessing-pesticides-under-endangered-species-act.

⁶⁴ For additional information on how EPA protects endangered species from pesticides, see: https://www.epa.gov/endangered-species

⁶⁵ Summary of the Pollution Prevention Act: https://www.epa.gov/laws-regulations/summary-pollution-prevention-act.

⁶⁶ Pollution Prevention flier: https://www.epa.gov/system/files/documents/2021-07/p2flier 2021 0.pdf.

In FY 2023, EPA will focus on carrying out sector-focused P2 National Emphasis Areas⁶⁷ and enabling the replication and leveraging of business successes supported by the \$5 million P2 grants awarded annually. The Agency will customize, develop, and deliver training to identify and deploy green chemistry and engineering solutions to companies, consumers, and communities. EPA also will implement training and outreach for communities overburdened with pollution, as well as Tribal, state, and local governments to help with product and service procurement choices that are environmentally sound and promote human and environmental health.

In FY 2023, EPA plans to update and strengthen the standards of the Safer Choice (SC) Program, ⁶⁸ which advances chemical safety by increasing the availability and identification of products containing ingredients that meet stringent health and environmental criteria, through a notice and comment process after consultation with stakeholders. The Agency will conduct outreach with federal, Tribal, state, and local government procurement officials and institutional and industrial purchasers to communicate the benefits of SC and other environmentally preferable products, and work to make SC-certified products more widely available to people of color and low-income communities. EPA will partner with organizations serving communities with environmental justice concerns to help custodial staff and house cleaning companies fight occupational exposure-related conditions (e.g., asthma) and gain access to SC-certified products. EPA also will update the Safer Chemical Ingredients List to enhance transparency and facilitate expansion of safer chemical choices and products, including increasing the number and volume of SC-certified products. ⁶⁹

Toxics Release Inventory (TRI)

The TRI Program provides data to support partnerships between community groups and companies that has resulted in decreased air emissions. ⁷⁰ In FY 2023, EPA will continue research on tools that can quickly and accurately identify vulnerable communities near TRI facilities, which would support prioritization of P2 initiatives. In addition, in FY 2023, EPA will continue to publish the TRI and use analyses of toxic chemical releases from industrial facilities located near communities with environmental justice concerns to identify and develop sector specific P2 case studies, best practices, outreach, and training. This will help facilitate adoption of P2 practices in the facilities and in the communities themselves.

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⁶⁷ P2 National Emphasis Areas: https://www.epa.gov/p2/p2-national-emphasis-areas-neas.

⁶⁸ For additional information on Safer Choice, see: https://www.epa.gov/saferchoice.

⁶⁹ Safer Chemical Ingredients List: https://www.epa.gov/saferchoice/safer-ingredients.

⁷⁰ TRI for Communities: https://www.epa.gov/toxics-release-inventory-tri-program/tri-for-communities.

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APPROPRIATION: Science & Technology Resource Summary Table

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Science & Technology				
Budget Authority	\$626,895	\$729,329	\$864,155	\$134,826
Total Workyears	2,039.2	1,987.7	2,190.9	203.2

^{*}For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

Bill Language: Science & Technology

For science and technology, including research and development activities, which shall include research and development activities under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980; necessary expenses for personnel and related costs, for executive oversight of regional laboratories, and travel expenses; procurement of laboratory equipment and supplies; hire, maintenance, and operation of aircraft; and other operating expenses in support of re- search and development,\$863,155,000, to remain available until September 30, 2024.

Note.—A full-year 2022 appropriation for this account was not enacted at the time the Budget was prepared; therefore, the Budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of Public Law 117-43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.

Program Projects in S&T

(Dollars in Thousands)

Program Project Clean Air and Climate	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Clean Air Allowance Trading Programs	\$4,809	\$6,793	\$8,800	\$2,007
Climate Protection	\$7,057	\$7,895	\$10,169	\$2,274
Federal Support for Air Quality Management	\$8,661	\$7,154	\$10,420	\$3,266
Federal Vehicle and Fuels Standards and Certification	\$87,233	\$96,783	\$152,209	\$55,426

Program Project	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Subtotal, Clean Air and Climate	\$107,760	\$118,625	\$181,598	\$62,973
Indoor Air and Radiation				
Indoor Air: Radon Program	\$112	\$157	\$157	\$0
Radiation: Protection	\$1,645	\$1,735	\$2,224	\$489
Radiation: Response Preparedness	\$3,063	\$3,096	\$4,383	\$1,287
Reduce Risks from Indoor Air	\$296	\$161	\$173	\$12
Subtotal, Indoor Air and Radiation	\$5,115	\$5,149	\$6,937	\$1,788
Enforcement				
Forensics Support	\$11,761	\$14,000	\$15,532	\$1,532
Homeland Security				
Homeland Security: Critical Infrastructure Protection	\$9,653	\$10,380	\$14,526	\$4,146
Homeland Security: Preparedness, Response, and Recovery	\$21,877	\$24,852	\$25,890	\$1,038
Homeland Security: Protection of EPA Personnel and Infrastructure	\$500	\$501	\$501	\$0
Subtotal, Homeland Security	\$32,031	\$35,733	\$40,917	\$5,184
IT / Data Management / Security				
IT / Data Management	\$2,782	\$3,072	\$3,195	\$123
Operations and Administration				
Facilities Infrastructure and Operations	\$65,093	\$67,500	\$68,912	\$1,412
Pesticides Licensing				
Pesticides: Protect Human Health from Pesticide Risk	\$2,431	\$2,803	\$2,917	\$114
Pesticides: Protect the Environment from Pesticide Risk	\$1,805	\$2,207	\$2,252	\$45
Pesticides: Realize the Value of Pesticide Availability	\$645	\$876	\$984	\$108
Subtotal, Pesticides Licensing	\$4,881	\$5,886	\$6,153	\$267
Research: Air, Climate and Energy				
Research: Air, Climate and Energy	\$76,733	\$95,250	\$132,924	\$37,674

	FY 2021	FY 2022 Annualized	FY 2023 President's	FY 2023 President's Budget v. FY 2022 Annualized
Program Project	Final Actuals	CR	Budget	CR
Research: Safe and Sustainable Water Resources				
Research: Safe and Sustainable Water Resources	\$92,719	\$112,250	\$119,286	\$7,036
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	\$112,717	\$133,000	\$141,477	\$8,477
Research: Chemical Safety for Sustainability				
Health and Environmental Risk Assessment	\$35,251	\$37,482	\$42,355	\$4,873
Research: Chemical Safety for Sustainability				
Endocrine Disruptors	\$13,859	\$16,304	\$17,095	\$791
Computational Toxicology	\$18,509	\$21,487	\$22,542	\$1,055
Research: Chemical Safety for Sustainability (other activities)	\$43,598	\$51,727	\$58,456	\$6,729
Subtotal, Research: Chemical Safety for Sustainability	\$75,966	\$89,518	\$98,093	\$8,575
Subtotal, Research: Chemical Safety for Sustainability	\$111,217	\$127,000	\$140,448	\$13,448
Ensure Safe Water				
Drinking Water Programs	\$4,088	\$4,364	\$6,776	\$2,412
Clean and Safe Water Technical Assistance Grants				
Water Quality Research and Support Grants	\$0	\$7,500	\$0	-\$7,500
TOTAL S&T	\$626,895	\$729,329	\$864,155	\$134,826

^{*}For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

Clean Air

Clean Air Allowance Trading Programs

Program Area: Clean Air and Climate Goal: Ensure Clean and Healthy Air for All Communities Objective(s): Improve Air Quality and Reduce Localized Pollution and Health Impacts

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$12,920	\$13,153	\$23,523	\$10,370
Science & Technology	\$4,809	\$6,793	\$8,800	\$2,007
Total Budget Authority	\$17,729	\$19,946	\$32,323	\$12,377
Total Workyears	66.2	63.7	82.0	18.3

Program Project Description:

This program is responsible for managing the Clean Air Status and Trends Network (CASTNET), an ambient monitoring network that has been continuously collecting data for more than 30 years. CASTNET serves as the Nation's primary source for assessing long-term trends in atmospheric sulfur and nitrogen deposition, regional ground-level ozone, and other forms of particulate and gaseous air pollution. CASTNET sites are uniquely situated in remote and high elevation areas within 39 states and seven tribal boundaries. The network provides valuable data to support the ozone National Ambient Air Quality Standards (NAAQS) in many areas not monitored by state, local, and tribal monitoring agencies. Under this program, independent audits and performance evaluations are performed to meet the NAAQS requirements and provide high-quality data. Additionally, CASTNET ozone data are used for exceptional event assessments of international transport, background concentrations, wildfire events, and stratospheric ozone intrusions often leading to ozone exceedances. States are required to provide exceptional event demonstrations in order to exclude monitoring data from the NAAQS design values. Used in conjunction with the National Atmospheric Deposition Program's wet deposition networks and other ambient air quality networks, CASTNET's data products also are used to determine the effectiveness of national and regional emission control programs, validate satellite measurements, and provide near-real time data to support AirNow and Air Quality Index (AQI) reporting tools.

The CASTNET program provides spatial and temporal trends in ambient air quality and is the largest network in the world reporting atmospheric deposition used to assess ecological impacts in sensitive ecosystems (e.g., national parks, freshwater bodies, and subalpine regions). The sites also fill in critical data gaps from urban networks that lack information on air quality issues affecting downwind population centers, such as oil and gas, wildfire smoke, and wood smoke in mountain valleys. Rural CASTNET sites are intentionally located away from stationary emission sources but are often located in or near low-income communities or communities of color. Maintaining the CASTNET monitoring network continues to be critical for assessing the environmental benefits realized from regional emission reduction programs (thereby reducing secondary pollutant formation of ozone and fine particles), as well as aiding states in exceptional events determinations. During the pandemic, EPA has addressed the disparate impacts of COVID-19 on

areas with poor air quality by using CASTNET to track local air quality and assess how pandemic-related policies and changes in economic activity have affected air quality.

EPA works closely with tribal governments to build tribal air monitoring capacity through partnerships with the CASTNET program. Since 2002, CASTNET has added seven sites on tribal lands, including two new sites in the northwest U.S. By expanding tribal partnerships, CASTNET can fill important spatial gaps in ambient and deposition monitoring while simultaneously integrating sites operated by tribes into a national program. Tribes will benefit from dedicated tribal monitoring sites that build tribal technical skills, provide near-real time air quality data to the community, and provide environmental data that help tribes assess the impacts of air pollution on cultural or natural resources on tribal lands.

To support modernization efforts, CASTNET will use the existing network infrastructure to fill in gaps in continuous measurements necessary to evaluate changes in atmospheric chemistry and global climate impacts on air quality and deposition. The Program is well-situated to measure background or regional levels of air toxics (e.g., ethylene oxide) and persistent chemicals of concern (e.g., PFAS compounds). Measuring speciated reactive nitrogen will provide valuable data that states can use to determine which species are driving PM formation and make more informed decisions on emission control strategies. Furthermore, continuing to expand capacity while modernizing the CASTNET infrastructure ensures data can be made available in near-real time to address short-term changes in air quality resulting from meteorological conditions, such as temperature inversions, or natural disasters, such as wildfires.

This program also is responsible for managing EPA's Long-Term Monitoring (LTM) program, which was created to assess the health of lakes and streams in response to changes in deposition of atmospheric pollutants. Today, it ensures that the Clean Air Act continues to be effective in reducing the impact of atmospheric pollutants (e.g., strong acid anions) on surface waters in New England, the Adirondack Mountains, the Northern Appalachian Plateau (including the Catskill mountains), and the Blue Ridge region. This program is operated cooperatively with partners in state agencies, academic institutions, and other federal agencies. The LTM surface water chemistry monitoring program provides field measurements for understanding biogeochemical changes in sulfur, nitrogen, acid neutralizing capacity, aluminum, and carbon in streams and lakes in relation to reductions in pollutant emissions and a changing climate. The LTM program is one of the longest running programs at EPA, providing a longitudinal dataset based on sampling and measurements since 1983.

This program also supports the Clean Air Allowance Trading Programs, which are nationwide and multi-state programs that address air pollutants that are transported across state, regional, and international boundaries. Programs designed to control SO₂ and NO_X include Title IV (the Acid Rain Program) of the Clean Air Act, the Cross-State Air Pollution Rule (CSAPR), the CSAPR Update (which was revised in 2021 in response to a court remand). The infrastructure for the Clean Air Allowance Trading Programs also supports implementation of other state and federal programs to control SO₂, hazardous air pollutants, and greenhouse gases.

Both the CSAPR and the CSAPR Update Rule require 27 states in the eastern U.S. to limit their emissions of SO₂ and/or NO_x in order to reduce or eliminate the states' contributions to fine

particulate matter and/or ground-level ozone pollution in other states. These programs set emissions limitations that are defined in terms of maximum statewide "budgets" for emissions of annual SO₂, annual NO_x, and/or ozone-season NOx from each state's large electric generating units. EPA is supporting state efforts with respect to best available retrofit technology, reasonable progress, and interstate visibility transport, as those obligations relate to SO₂ emissions from electricity generating units.⁷¹ The air quality and other environmental information gathered through this program support other Clean Air Allowance Trading Program-related rulemakings, such as EPA's proposal to reduce emissions contributing to interstate air pollution under the 2015 O3 NAAQS and rulemakings associated with Regional Haze.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.1, Improve Air Quality and Reduce Localized Pollution and Health Impacts in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2023, EPA will:

- Continue to support 64 CASTNET, including seven tribal sites, 31 NADP National Trends Network (NTN), 71 NADP Ammonia Monitoring Network (AMoN), and LTM monitoring sites that provide long-term atmospheric concentrations, deposition, and surface water quality data. Data are used to analyze and assess air quality, trends in sulfur and nitrogen deposition, critical loads, and other indicators of ecosystem health.
- Provide support for independent audits and required performance evaluations to assure high-quality data to support the NAAQS and environmental assessments.
- Continue progress toward increasing monitoring capacity by working to identify new tribal partners that would benefit from joining a national air monitoring program.
- Invest in technology and small businesses by replacing aging equipment, repairing monitoring shelters more than 30 years old that have deteriorated due to extreme weather and deploying new equipment and monitoring sites in rural, often low-income/minority areas. The CASTNET contractor allocates 55 percent of their subcontract dollars to small businesses responsible for performing calibrations, managing site operators, and data analyses.
- Upgrade aging CASTNET equipment. To improve overall data quality EPA will replace continuous ozone analyzers, and procure new gas analyzers (e.g., CO, VOCs, speciated nitrogen) that will support NAAQS assessments, emission control strategies, and regulatory actions in the future. Analyzers will be integrated into the existing automated calibration systems to improve network resiliency.
- Utilize existing infrastructure to expand network capacity by adding measurement systems for background and regional concentrations of air toxics and emerging pollutants of

⁷¹ Clean Air Act § 110 and § 169A; refer to 40 CFR 52.2312.

concern. Data will complement urban measurements and provide valuable information on atmospheric pathways and chemical transformations that will impact health risks.

- Continue to modernize the data reporting tools and visualizations to improve user experiences and data access, particularly during emergencies (e.g., COVID-19 pandemic). Strengthening front-end and back-end data management platforms will improve system reliability and allows state and local agencies to quickly make critical decisions. Providing real-time air quality data during such events is valuable for informing vulnerable populations about health risks.
- Assure the continuation of ongoing SO₂ and NO_X emission reductions from power plants in the eastern half of the U.S. by implementing CSAPR and the CSAPR Update, and across the contiguous U.S. by implementing the Acid Rain Program.⁷²
- Ensure accurate and consistent results for the Clean Air Allowance Trading Programs. Continue work on performance specifications and investigating monitoring alternatives and methods to improve the efficiency of monitor certification and emissions data reporting.
- Work with states to implement emission reduction programs to comply with CAA Section 110(a)(2)(D)(i)(I) requirements, including conducting environmental justice analyses to consider the distributional impacts of emissions on overburdened communities.⁷³

Performance Measure Targets:

(PM NOX) Tons of ozone season NOx emissions from electric power generation sources.	FY 2022 Target	FY 2023 Target
	355,000	344,000

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$2,007.0) This program change is an increase to support CASTNET modernization efforts including increasing monitoring capacity, investing in technology, upgrading equipment, and improving user experience.

Statutory Authority:

Clean Air Act.

² Clean Air Act §§ 110(a)(2)(D) and 401.

⁷³ For more information on program performance, please see: https://www.epa.gov/airmarkets/progress.

Climate Protection

Program Area: Clean Air and Climate Goal: Tackle the Climate Crisis

Objective(s): Reduce Emissions that Cause Climate Change

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$91,632	\$97,000	\$125,216	\$28,216
Science & Technology	\$7,057	\$7,895	\$10,169	\$2,274
Total Budget Authority	\$98,689	\$104,895	\$135,385	\$30,490
Total Workyears	211.3	214.1	236.9	22.8

Program Project Description:

The Climate Protection Program supports implementation and compliance with greenhouse gas (GHG) emission standards for light-duty and heavy-duty vehicles developed under EPA's Federal Vehicle and Fuels Standards and Certification Program. Resources under this program also support compliance activities for implementing the National Highway Traffic Safety Administration's (NHTSA) Corporate Average Fuel Economy (CAFE) standards. Under authorities contained in the Clean Air Act and the Energy Policy Act, EPA is responsible for issuing certificates and ensuring compliance with both the GHG and CAFE standards.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Reduce Emissions that Cause Climate Change in the FY 2022 - 2026 EPA Strategic Plan.

Resources under this program will support implementation and compliance activities associated with EPA's GHG and NHTSA's fuel economy standards for light-duty and heavy-duty vehicles and engines. Resources will support the following activities:

Certification and Compliance

Implementation of the GHG emission standards for light-duty and heavy-duty vehicles and engines has significantly increased EPA's certification and compliance responsibilities. These responsibilities play a critical role in ensuring that the programs achieve their climate goals. Over time, in an effort to provide greater compliance flexibility for manufacturers, EPA has introduced numerous innovative features into the vehicle certification process. These features include new and more comprehensive trading programs, credits for off-cycle emission reductions, and new federal test procedures. In FY 2023, EPA will be implementing a substantially expanded "Phase 2" of the heavy-duty vehicle and engine GHG program. This implementation requires significant expansions of EPA's information technology systems, which provide an efficient means for manufacturers to apply for and receive certificates of conformity, and for EPA to audit and oversee manufacturer compliance with the revised requirements of the new heavy-duty GHG standards.

Vehicle and Engine Testing Services

EPA's National Vehicle & Fuel Emissions Laboratory (NVFEL) has invested significant resources to maintain its critical vehicle and engine testing capabilities and to upgrade them as needed to implement new standards for fuel, vehicle, and engine emissions. These investments have included updates to its four-wheel drive dynamometers and analytical systems needed to perform regulation development and certification testing of light-duty, medium-duty, and heavy-duty vehicles, including battery electric and hybrid electric technologies. This modernized test environment has led to such developments as new test methods for accurately measuring the efficiency and range of electrified vehicles and new processes for gathering and analyzing in-use fuel efficiency data from vehicles tested on the road.

In FY 2023, NVFEL will continue to direct resources in expanded electric vehicle charging infrastructure in the laboratory to support anticipated future test requirements for light-duty and heavy-duty vehicles and is preparing for testing of hydrogen fuel cell technologies. NVFEL's ongoing facility modernization has been essential to the implementation of requirements for EPA's Phase 2 GHG regulations for heavy-duty and medium-duty vehicles. Importantly, it also has enabled greater production of scientific data on new and emerging vehicle and engine technologies, leading to the development of more advanced computer models to support EPA's rulemaking activities. Equipment modernization is critical for keeping pace with technology advancements in the industry, as well as maintaining NVFEL's role as a trusted testing standard for foreign and domestic manufacturers to compare against in certifying their products and as a deterrent against non-compliance.

In addition to investing in emerging needs, NVFEL will continue to maintain, repair, and replace aging laboratory equipment needed to sustain its core compliance testing activities. In FY 2023, NVFEL plans to extensively replace aging or obsolete test equipment supporting its engine compliance and fuels enforcement programs. This represents a continuation of annual and ongoing capital equipment maintenance associated with the expansion of lab testing programs needed to implement light-duty and heavy-duty criteria pollutant and GHG regulations, which have increased NVFEL's operation and maintenance costs by an estimated \$2.1 million per year.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$227.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,047.0 / +2.3 FTE) This program change is an increase in support of the National Vehicle and Fuel Emissions Laboratory compliance/certification work and mobile source vehicle emissions analyses. Additional resources at the lab support restoring capacity to

test and certify engines, fuels, and vehicles to ensure compliance with regulatory standards, and to generate emissions data to support regulatory development work essential to tackling the climate change crisis. This includes \$393.0 thousand in payroll.

Statutory Authority:

Clean Air Act; Pollution Prevention Act (PPA), §§ 6602-6605; National Environmental Policy Act (NEPA), § 102; Clean Water Act, § 104; Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), § 8001; Energy Policy Act of 2005, § 756.

Federal Support for Air Quality Management

Program Area: Clean Air and Climate Goal: Ensure Clean and Healthy Air for All Communities Objective(s): Improve Air Quality and Reduce Localized Pollution and Health Impacts

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$131,015	\$138,020	\$289,010	\$150,990
Science & Technology	\$8,661	\$7,154	\$10,420	\$3,266
Total Budget Authority	\$139,676	\$145,174	\$299,430	\$154,256
Total Workyears	832.7	843.0	945.4	102.4

Program Project Description:

Federal support for the criteria pollutant and air toxics programs includes a variety of tools to characterize ambient air quality and the level of risk to the public from air pollutants and to measure national progress toward improving air quality and reducing associated risks. The Federal Support for Air Quality Management Program supports development of State Implementation Plans (SIPs) through modeling and other tools and assists states in implementing, attaining, maintaining, and enforcing the National Ambient Air Quality Standards (NAAQS) for criteria pollutants. The Program also supports development and provision of information, training, and tools to assist state, tribal, and local agencies, as well as communities, to reduce air toxics emissions and risks specific to their local areas. In addition, the Program supports activities related to the Clean Air Act (CAA) stationary source residual risk and technology review program. EPA is required to assess the level of risk remaining after promulgation of National Emission Standards for Hazardous Air Pollutants (NESHAP) that are based on Maximum Available Control Technology (MACT) within eight years of that promulgation. In addition, the Agency is required to review all NESHAP at least every eight years to determine if revisions are needed to reflect developments in practices, processes, and control technologies.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.1, Improve Air Quality and Reduce Localized Pollution and Health Impacts in the FY 2022 - 2026 EPA Strategic Plan.

During FY 2023, as part of implementing key activities in support of attainment of the NAAQS, EPA will provide states and local air agencies with scientifically and technically sound assistance in developing SIPs. This assistance includes providing models, modeling inputs and tools, and technical data and guidance and identifying emission control options. EPA ensures national consistency in how air quality modeling is conducted as part of regulatory decision-making, including federal and state permitting programs, SIP-related actions, as well as how conformity determinations are conducted across the U.S. The Agency will work with states and local air

agencies to ensure that particulate matter (PM) hot-spot analyses are conducted in a manner consistent with the transportation conformity regulation and guidance.

One of EPA's priorities is to fulfill its statutory and court-ordered obligations. In FY 2023, EPA will continue to conduct the periodically required "technology reviews" of NESHAP and conduct required risk assessments for MACT-based NESHAP. EPA will enhance risk assessment capabilities to better identify and determine impacts on communities. The Agency also will transition to an approach to share air toxics data faster and more regularly to the public, allowing for increased transparency and the ability to see trends and risks over time. By 2023, EPA will start reporting the most current air toxics data each year in the annual Air Trends Report and an online interactive tool instead of the current three to four-year cycle and provide that data at increased spatial resolution. EPA will prioritize work with an emphasis on meeting court-ordered deadlines and also incorporate environmental justice considerations as part of the decision-making process.

EPA will continue to provide information and assistance to states and communities through documents, websites, webinars, and training sessions on tools to help them provide input to environmental justice assessments that can inform risk reduction strategies for air toxics. EPA will continue to communicate effectively to, and collaborate with, communities with environmental justice concerns to address air toxics issues. EPA will continue its multi-pollutant air quality management work with state and local areas, factoring environmental justice into prioritization efforts, including providing tools to support state, tribal and local governments in strategy development. EPA will continue to look at multiple pollutants in an industrial sector and identify ways to take advantage of the co-benefits of pollution control. The focus of these efforts is to address an individual sector's emissions comprehensively and to prioritize regulatory efforts to address the sources and pollutants of greatest concern to overburdened communities. In developing sector and multi-pollutant approaches, EPA is building innovative solutions that address the differing and cumulative nature of the multiple pollutants and associated industrial sectors.

In FY 2023, EPA will continue to work with internal and external stakeholders to improve ambient air quality monitoring networks and measurement techniques to fill data gaps and to provide better input to estimation of population exposure to criteria and toxic air pollutants. To ensure data quality, EPA will continue to implement and manage independent quality assurance programs for national monitoring networks as well as for federal and commercial laboratories that produce ambient air monitoring data.

In FY 2023, EPA will continue to work with partners to improve emissions factors and inventories, including the National Emissions Inventory. This effort includes gathering improved activity data from emissions monitoring and using geographic information systems and satellite remote sensing systems, where possible, for key point, area, mobile, and fugitive sources, and global emission events.

Performance Measure Targets:

Work under this program supports performance results in the Federal Support for Air Quality Management program under the EPM appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$588.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,678.0 / +11.0 FTE) This program change is an increase in the development of science, technology, and methodologies to better implement the Clean Air Act, including: enhancing risk assessment capabilities to better identify and determine impacts on communities; communicating and collaborating with environmental justice communities to address air toxics concerns; and improving ambient air monitoring networks and measurement techniques to fill data gaps and better estimate the population's exposure to criteria and toxic air pollutants. This investment includes \$2.234 million in payroll.

Statutory Authority:

Clean Air Act.

Federal Vehicle and Fuels Standards and Certification

Program Area: Clean Air and Climate Goal: Tackle the Climate Crisis Objective(s): Reduce Emissions that Cause Climate Change

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Science & Technology	\$87,233	\$96,783	\$152,209	\$55,426
Total Budget Authority	\$87,233	\$96,783	\$152,209	\$55,426
Total Workyears	315.5	308.5	350.5	42.0

Program Project Description:

Under the Federal Vehicle and Fuels Standards and Certification Program, EPA develops, implements, and ensures compliance with national emission standards to reduce mobile source related air pollution from: light-duty cars and trucks; heavy-duty trucks and buses; nonroad engines and equipment; and from the fuels that power these engines. The Program also evaluates new emission control technology and provides state, tribal, and local air quality managers and transportation planners with guidance, tools, and other information to develop additional strategies and place-based transportation programs to reduce mobile source pollution.

As part of ensuring compliance with national emission standards, the Program tests vehicles, engines, and fuels, and establishes test procedures for federal emissions and fuel economy standards. The Program operates test cells that simultaneously measure criteria pollutants and greenhouse gas (GHG) emissions, reviews certification applications for light-duty vehicles and heavy-duty engines to approve applications for criteria pollutant and GHG emission standards and examines for potential violations.

National Vehicle and Fuel Emissions Laboratory (NVFEL)

The NVFEL ensures air quality benefits and fair competition in the marketplace by conducting testing operations on motor vehicles, heavy-duty engines, nonroad engines, and fuels to certify that all vehicles, engines, and fuels that enter the U.S. market comply with all federal clean air, GHG, and fuel economy standards. The NVFEL conducts vehicle and engine emission tests as part of pre-production tests, certification audits, in-use assessments, and recall programs to ensure compliance with mobile source programs. The NVFEL also produces critical test data on new and emerging vehicle and engine technologies to support the development of future greenhouse gas and criteria pollutant regulations. Through cooperative partnerships and committee involvement, the lab leads the development and implementation of test methods and procedures for vehicles, engines, and fuels to ensure consistent data quality among manufacturers' labs, measure fuel efficiency, and verify compliance of electrified and conventional vehicles with EPA standards.

Renewable Fuel Standard (RFS)

The RFS Program was created under the Energy Policy Act of 2005 (EPAct), which amended the Clean Air Act, and was expanded under the Energy Independence and Security Act of 2007 (EISA). The RFS Program requires a certain volume of renewable fuel to replace or reduce the quantity of petroleum-based transportation fuel, heating oil, or jet fuel.

Supporting Tribal, State and Local Governments

EPA works with tribal, state, and local governments to ensure the technical integrity of the mobile source control emission benefits, including in State Implementation Plans (SIPs) and transportation conformity determinations. EPA develops and provides information and tools to assist tribal, state, and local agencies, as well as communities, to reduce criteria pollutant and air toxics emissions and risks specific to their local areas. Reductions in emissions of mobile source air pollution, such as components of diesel exhaust, are achieved through: guidance and technical assistance for state and local Clean Air Act mobile source programs in nonattainment and maintenance areas for the National Ambient Air Quality Standards (NAAQS); establishing national emissions standards for vehicles, equipment, and fuels, research of public health impacts and mitigation options; methods for quantifying multi-pollutant emission reductions for place-based strategies; and partnership approaches working with tribal, state, and local governments, as well as a variety of non-governmental stakeholder groups.

Prioritizing Environmental Justice

In response to the Administration's priorities and goals, EPA's mobile source programs will further integrate environmental justice (EJ) and equity considerations. This includes: 1) outreach and inclusion throughout the regulatory development process; 2) analysis of current conditions to understand economic inequities potentially related to EPA's regulatory policies – as well as disparities in exposure to mobile source air pollution experienced by people of color, low-income populations, and tribal communities; 3) analysis of the equity and air quality improvements from EPA's regulatory actions and voluntary programs; 4) technical assistance to state and local governments to reduce regional and localized criteria pollutant and other emissions through regulatory and non-regulatory strategies, including nearby communities with environmental justice concerns, and within the context of meeting Clean Air Act SIP and transportation conformity requirements; and 5) exploration of non-regulatory mitigation measures to further target improvements in air quality for those disproportionately exposed to air pollution from mobile sources.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Reduce Emissions that Cause Climate Change in the FY 2022 - 2026 EPA Strategic Plan.

To support this work, EPA is requesting \$30 million and 42 FTE in FY 2023 to invest in program activities to address the climate crisis. This includes the development of analytical methods, regulations and analyses to support climate protection by controlling greenhouse gas emissions from light-duty, medium-duty, and heavy-duty vehicles.

Federal Vehicle and Fuels Standards and Certification Program

In FY 2023, the Federal Vehicle and Fuels Standards and Certification Program will continue to focus its efforts on certification responsibilities. The Agency will continue to perform its compliance oversight functions on priority matters, conducting compliance oversight tests where evidence suggests noncompliance. EPA will continue to conduct pre-certification confirmatory testing activities for emissions and fuel economy for passenger cars and will increase on-road measurements of in-use vehicle emissions. EPA anticipates reviewing and approving about 4,700 vehicle and engine emissions certification requests from vehicle and engine manufacturers, including light-duty vehicles, heavy-duty diesel engines, nonroad engines, marine engines, locomotives, and others. Demand for EPA's certification services has increased significantly, due in part to the addition of exhaust and fuel evaporative emissions certification requirements for marine, other nonroad, and small spark-ignited engines. Accordingly, NVFEL will increase compliance testing in each of these areas in FY 2023.

EPA utilizes in-use emissions data provided by light-duty vehicle manufacturers to measure compliance and determine if any follow-up evaluation or testing is necessary. Since CY 2000, light-duty vehicle manufacturers have been required to test a number of newer and older in-use vehicles and provide the data to EPA. The Agency receives over 6,000 emissions tests results from more than 2,000 vehicles annually. EPA reviews the data and determines if there are any specific vehicles, models, or manufacturers that are failing in-use emissions standards. The Agency will use this information submitted by light-duty manufacturers, together with emissions data collected at NVFEL, to determine if there are vehicle models which should be recalled and repaired to address excess in-use emissions and that should be identified for testing for the upcoming model year prior to granting the manufacturer a certificate of conformity, which allows the manufacturer to sell vehicles in the U.S.

Emission Standards for New Motor Vehicles

In FY 2023, EPA will take action to reduce air pollution and GHG emissions by focusing on the transportation sector's largest contributors to criteria pollutant and GHG emissions: light-duty vehicles (LDVs) and heavy-duty vehicles (HDVs). Work also supports EPA's long-term performance goal to promulgate final rules that will reduce GHG emissions from light duty, medium-duty, and heavy-duty vehicles; electric utility generating units; and the oil and gas industry.

In FY 2022, EPA completed a revision of the light-duty vehicle GHG standards established in April 2020 (the Safer Affordable Fuel Efficient Vehicles Rule). In August 2021, EPA issued a proposed rule setting revised "near-term" standards through model year (MY) 2026 and issued a final rule in December 2021. In March 2022, EPA reinstated California's authority under the Clean Air Act (CAA) to implement its own GHG emission standards and zero emission vehicle (ZEV) sales mandate. As a result of this action, other states may choose to adopt and enforce California's GHG emission standards in lieu of the Federal standards, consistent with section 177 of the Clean Air Act.

The near-term light duty rule will serve as a stepping-off point for longer-term standards. In FY 2023, EPA will develop a longer-term emissions standard rulemaking proposal for new multipollutant emissions standards, including for greenhouse gas emissions, for light- and medium-duty vehicles beginning with MY 2027 and extending through and including at least MY 2030. These

standards will help transition the fleet to zero and near-zero emissions. Many automakers have recently announced ambitious plans for electrifying their new LDV fleets in the 2030 to 2040 timeframe. This rulemaking also will be a key measure in contributing to the President's commitment under the Paris Agreement to reduce U.S. GHG emissions by 50-52 percent from 2005 levels by 2030.

By December 2022, EPA will propose and finalize a rulemaking to reduce nitrogen oxides (NOx) emissions from MY 2027 and later heavy-duty engines and vehicles. This rule also will update the Phase 2 GHG standards for 2027 and later by taking into consideration the role that zero-emission heavy-duty vehicles have in reducing emissions from certain heavy-duty market segments. Pollution from trucks has been a long-standing obstacle to advancing environmental justice, as many low-income communities and communities of color live near highways or in heavily polluted areas with frequent truck congestion and idling. Setting clear and stringent standards for truck pollution is critical to delivering on the President's commitment to delivering tangible benefits to historically underserved and overburdened communities.

In FY 2023, EPA will work on a rulemaking under the CAA to establish new GHG emissions standards for heavy-duty engines and vehicles to begin as soon as MY 2030. This rule will reduce GHG and other emissions from highway HDVs, the second-largest source of transportation GHG emissions. This action will build off of the heavy-duty MY 2027 rulemaking and accelerate the transition to zero emission vehicles. A key focus for the GHG elements of this effort will be the shift from HDVs powered by internal combustion engines to those powered by zero emission technologies, such as battery electric and fuel-cell technologies. EPA's future GHG standards for HDVs will build upon these industry commitments.

EPA will invest significant resources to address a myriad of new technical challenges to support these two sets of long-term rulemakings, which will include added LDV and HDV testing and modeling capabilities at NVFEL. Key to this technical work is to understand the cost, feasibility, and infrastructure impacts of electrifying the broad range of products in the LDV and HDV sectors. This will include vehicle demonstration projects focused on emerging technologies, that are still in the pre-production stage with manufacturers, but are expected to be strategically important in achieving future standards.

Fuel Economy Labeling Requirements

In FY 2023, EPA also will oversee compliance with vehicle fuel economy labeling requirements. In past years, EPA conducted in-use audits of manufacturer "coast-down" data, revealing issues in manufacturer data submitted to EPA and, as a result, found inaccurate fuel economy labels on more than a million vehicles from several manufacturers. While EPA temporarily suspended its coast-down testing due to the COVID-19 pandemic, the Agency will resume this testing when public health guidance allows it.

Tier 3 Standards

In FY 2023, EPA will continue implementing the Tier 3 standards for light-duty vehicles and certifying manufacturers' fleets for vehicle MY 2023 and MY 2024. EPA is responsible for establishing the test procedures needed to measure tailpipe emissions and for verifying manufacturers' vehicle fuel economy data. As a result, the Agency will continue to maintain its

critical laboratory equipment and testing resources to ensure that new cars and trucks comply with the Tier 3 emissions standards.

Marine and Aircraft Emission Reduction Measures

EPA will continue working with the International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO) on programs to control pollutant emissions from marine and aircraft engines, respectively. EPA is supporting the State Department and Coast Guard on technical issues related to establishing measures to achieve GHG targets established at IMO. In FY 2022, EPA expects to transition from work on short-term to more ambitious medium-term measures. This work will continue through FY 2023. At ICAO, EPA will actively participate in the development of new CO2 standards for decision in February 2025 as well as technical work that could lead to future NOx/PM standards. Additionally, EPA is developing a domestic rule for aircraft engine PM standards, expected to be finalized in November 2022.

In addition to the international efforts for aviation, EPA is continuing its work to address lead in aviation gasoline. In coordination with the Federal Aviation Administration and working with airports, local air agencies, and communities, EPA is evaluating potential exposures to lead from the use of leaded aviation gasoline in piston-engine aircraft as well as potential mitigation measures.

Emissions Modeling

The Motor Vehicle Emission Simulator (MOVES) is the Agency's emission modeling system that estimates emissions for on-road and nonroad mobile sources at the national, county, and project levels for criteria air pollutants, GHGs, and air toxics. In FY 2023, the official version of EPA's model, MOVES3, will be used to estimate impacts of the Agency's emission control programs and will be used by states and metropolitan planning organizations (MPOs) in their work to meet the NAAQS, including the development of SIPs and transportation conformity analyses. The Agency also will support users on any new model releases that incorporate the best available data and science and account for the latest emission standards.

National Vehicle and Fuel Emissions Laboratory Facility Infrastructure

NVFEL provides all laboratory testing and support functions necessary for the Agency to certify that all vehicles, engines, and fuels sold in the United States are in compliance with U.S. emission standards, representing 4,700 certificates issued to vehicle and engine manufacturers on an annual basis.

In FY 2023, the mechanical, electrical, control, and building management systems for the HVAC (heating, ventilation, and air conditioning) at NVFEL will be at or beyond the end of useful life with the completion of the current, 25-year, Energy Savings Performance Contract (ESPC). ESPCs, private/public partnership contract vehicles coordinated through the Department of Energy, use facilities' energy and operational savings to offset many of the contract costs.

Given these needs, EPA is pursuing an infrastructure upgrade project for the NVFEL facility, and the Agency is evaluating a new ESPC. In FY 2023, \$20 million in additional resources are requested to support renewal of the ESPC. EPA anticipates signing the proposed ESPC in FY 2022 or FY 2023 with potential implementation costs in excess of \$24 million. The energy savings to

be realized when the ESPC is fully implemented is estimated to be 33,000 MBTU annually, with water conservation of 1.3 million gallons annually.

Resources for the renewal of the ESPC are critical to support the ability of NVFEL to carry-out its mission-critical work of certifying vehicle compliance. Ensuring industry's compliance is a priority for EPA and an essential safeguard of fair market competition for manufacturers of vehicles and engines introduced into commerce in the United States.

Renewable Fuel Standards

EPA activity in the fuel sector will be centered on the implementation of the RFS program. Congress established renewable fuel volume targets through CY 2022, leaving it to the Agency to establish the volumes for CY 2023 and beyond. EPA's schedule currently calls for the Agency to issue a final "RFS Set Rule" establishing such volumes in early FY 2023.

In addition, EPA will continue the efforts associated with the ongoing implementation of the program. These include: 1) updating and revising the regulations to improve program implementation and effectiveness and enable new sources of renewable fuel volumes; 2) evaluating applications for new biofuels and/or their feedstocks; 3) registering new renewable fuel facilities to enable them to generate renewable fuel credits known as Renewable Identification Numbers (RINs); 4) building critical new capability in EPA's Moderated Transaction System (EMTS) for tracking the generation, transfer, and use of RINs for compliance; 5) evaluating and implementing, if appropriate, enhancements to improve program operations, oversight and enforceability; 6) evaluating and implementing IT systems modifications and enhancements that provide the greatest returns on investment through continuous improvement; 7) ensuring the integrity of the RFS program through enforcement actions against those using the program for fraudulent gain; and 8) supporting the Department of Justice in defending the Agency's implementation of the RFS program in numerous challenges in court.

In addition to the RFS program, EPA will continue to implement gasoline and diesel fuel quality standards and obligations under the Clean Air Act. This includes many of the same compliance and enforcement oversight activities mentioned above for the RFS. In addition, in late 2020 EPA finalized a fuel regulation streamlining rule that included updated registration, recordkeeping, and reporting requirements. EPA will continue efforts in FY 2023 to implement these requirements through continuous improvement of IT registration and reporting systems to deliver the full impact and benefit of the investment made in the streamlined regulations. These include automation and reduced registration, administration, and reporting burdens for both the regulated community and EPA. Finally, in FY 2023 EPA will continue its ongoing research into new opportunities to improve and/or protect fuel quality in ways that can reduce air pollution and improve public health and welfare.

EPA will continue to operate and maintain the credit trading systems under the RFS. EISA expanded the renewable fuels provisions of EPAct and requires additional studies in various areas of renewable fuel use. EISA also requires EPA to develop a comprehensive lifecycle GHG methodology to implement the Act's GHG threshold requirements for the RFS. Producers of new and advanced biofuels regularly seek to qualify their fuels under RFS, and EPA will continue to

evaluate such feedstocks and fuels to determine eligibility for the program. The Agency also will look at ways to update the science and data analysis that supports EPA's evaluation methodology.

In FY 2023, EPA will maintain oversight of the RFS program and continue to evaluate compliance with RFS provisions through its system, which is used to track the creation, trades, and use of billions of RINs for compliance. The tracking system handles 4,000 to 6,000 submissions per day, typically averaging more than 20,000 transactions per day, and the generation of more than 1.4 billion RINs per month. RINs are generated with the production of qualifying renewable fuel and are used to achieve national RFS programmatic goals of reducing or replacing the quantity of petroleum-based transportation fuel, heating oil, or jet fuel produced.

In FY 2023, EPA will continue to work with stakeholders to implement a new electronic reporting portal for its Fuel and Fuel Additive (FFA) program. EPA implemented an electronic registration system for the FFA program in FY 2020; companies once registered may then introduce FFA products into commerce. Companies still submit related quarterly and annual FFA reports to the Agency in formats that require EPA to manually transcribe the information into its fuels database. EPA plans to incorporate FFA reports into the eReporting system in FY 2023 after implementing eReporting for higher priority reporting needs in FY 2022.

Supporting Tribal, State and Local Governments

In FY 2023, EPA will continue to provide tribal, state and local governments with assistance in air quality planning, including SIPs and transportation conformity determinations, especially for nonattainment areas working to attain the ozone and PM2.5 NAAQS. EPA will continue to work with tribal, state, and local governments to ensure the technical integrity of the mobile source emission estimates in their SIPs and any Tribal Implementation Plans (TIPs). In addition, EPA will assist states in developing Clean Air Act-required programs—such as new inspection and maintenance (I/M), fuels, and vehicle miles travelled (VMT) offset programs—as well as identifying place-based control options and provide guidance for ozone nonattainment areas for the 2008 and 2015 ozone NAAQS that are bumped up to a higher classification. In addition, in partnership with the Department of Transportation, EPA will ensure national consistency in how transportation conformity determinations are conducted across the U.S. and in the development of motor vehicle emissions budgets in SIPs, EPA's adequacy findings on these budgets, and emission reduction strategies to ensure new transportation investments to support state air quality goals.

EPA will continue to provide regulations, guidance, state-of-the-science models (such as MOVES), and assistance to state and local agencies working on CAA-required PM2.5 and PM10 hot-spot analyses. This will help protect public health in local communities, including communities of color and low-income communities with environmental justice concerns, near new or expanded highway and freight terminal projects with significant increases in diesel truck traffic. In addition, EPA will continue to provide regulations, guidance, and support to states with respect to existing I/M programs that focus on in-use vehicles and engines. Basic and/or Enhanced I/M testing is currently being conducted in almost 30 states with EPA technical and programmatic guidance. EPA also will continue to provide regulatory actions and technical assistance to certain states considering changes or removal of low Reid Vapor Pressure (RVP) fuel programs. Finally, EPA will continue to develop methods for tribal, state and local agencies to quantify multi-pollutant emission reductions from available and newly emerging emission reduction strategies.

Prioritizing Environmental Justice

In FY 2023, EPA will continue to work with a broad range of stakeholders - including communities with environmental justice concerns - to develop targeted, sector-based, and place-based incentives for diesel fleets (including school buses, ports, and other goods movement facilities) to limit emissions from older diesel engines not subject to stringent emissions standards. Millions of people in the U.S. currently live and work near ports and can be exposed to air pollution associated with emissions from diesel engines at ports, including particulate matter, nitrogen oxides, ozone, and air toxics. The near-port communities that bear the brunt of air pollution from these diesel engines are often comprised of low-income populations and people of color. EPA will focus its efforts on reducing mobile source emissions in and around ports through EPA's Ports Initiative. EPA will assist tribal, state, and local governments to reduce emissions in or near communities with EJ challenges to meet CAA SIP and transportation conformity requirements. EPA also is working with industry to bring about field testing and emissions testing protocols for a variety of innovative energy-efficient, emissions reducing technologies for the legacy fleet. As discussed above, EPA also will be establishing new emission standards for highway heavy-duty commercial vehicles, which is a high priority for many communities with environmental justice concerns.

Performance Measure Targets:

(PM CRT) Number of certificates of conformity issued that demonstrate that the respective engine, vehicle, equipment, component, or system	FY 2022 Target	FY 2023 Target
conforms to all applicable emission requirements and may be entered into commerce.	4,700	4,700
		DV. 2022
(PM RUL) Number of final rules issued that will reduce GHG emissions	FY 2022	FY 2023
from light duty, medium-duty, and heavy-duty vehicles; electric utility	Target	Target
generating units; and the oil and gas industry.	No Target	No Target
	Established	Established

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$5,104.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$206.0) This change to fixed and other costs is an increase due to the recalculation of lab utilities.
- (+\$20,000.0) This program change is an increase to support the renewal of the Ann Arbor Facility Energy Saving Performance Contract (ESPC), which supports the ability of NVFEL to carry out its mission-critical work of certifying vehicle compliance.
- (+\$30,116.0 / +42.0 FTE) This program change is an increase that supports program activities to address the climate crisis. This includes the development of analytical

⁷⁴ For more information, please see the DERA Fourth Report to Congress, July 2019, which may be found at: https://www.epa.gov/cleandiesel/clean-diesel-reports-congress.

⁷⁵ For more information, please visit https://www.epa.gov/ports-initiative.

methods, regulations, and analyses to support climate protection by controlling greenhouse gas emissions from light duty, medium-duty, and heavy-duty vehicles. This investment includes \$8.065 million in payroll.

Statutory Authority:

Title II of the Clean Air Act; Motor Vehicle Information Cost Savings Act; Alternative Motor Fuels Act of 1988; National Highway System Designation Act; Energy Policy Act of 1992; Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU); Energy Policy Act of 2005; Energy Independence and Security Act of 2007.

Enforcement

Forensics Support

Program Area: Enforcement

Goal: Enforce Environmental Laws and Ensure Compliance Objective(s): Detect Violations and Promote Compliance

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Science & Technology	\$11,761	\$14,000	\$15,532	\$1,532
Hazardous Substance Superfund	\$1,250	\$1,145	\$1,263	\$118
Total Budget Authority	\$13,010	\$15,145	\$16,795	\$1,650
Total Workyears	59.9	68.9	70.3	1.4

Program Project Description:

The Forensics Support Program provides expert scientific and technical support for criminal and civil environmental enforcement cases, as well as technical support for the Agency's compliance efforts. EPA's National Enforcement Investigations Center (NEIC) is an environmental forensic center accredited for both laboratory analysis and field sampling operations that generate environmental data for law enforcement purposes. It is fully accredited under International Standards Organization (ISO) 17025, the main standard used by testing and calibration laboratories, as recommended by the National Academy of Sciences. The NEIC maintains a sophisticated chemistry and physical science laboratory and a corps of highly trained inspectors and scientists with expertise across environmental media. The NEIC works closely with EPA's Criminal Enforcement Program to provide technical support (e.g., sampling, analysis, consultation, and testimony) to criminal investigations. The NEIC also works closely with other EPA programs to provide technical support, consultation, on-site inspection, investigation, and case resolution services in support of the Agency's Civil Enforcement Program.

The Forensics Support Program will continue to provide expert scientific and technical support for EPA's criminal and civil enforcement efforts, focus its work on collecting and analyzing materials to characterize contamination, and attribute it to individual sources and/or facilities. The work NEIC performs typically represents the most complex cases nationwide, requiring a level of expertise and equipment not found elsewhere in EPA, as well as support to evaluate and leverage emerging technologies.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Detect Violations and Promote Compliance in the FY 2022 - 2026 EPA Strategic Plan.

⁷⁶ Strengthening Forensic Science in the United States: A Path Forward, National Academy of Sciences, 2009, available at: http://www.nap.edu/catalog.php?record id=12589.

In FY 2023, the Agency requests an additional \$1.5 million and 1.3 FTE to ensure EPA has the capacity and technical expertise to investigate, analyze, sample, test, and transport hydrofluorocarbons (HFCs). The Forensics Support Program provides expert scientific and technical support for EPA's criminal and civil enforcement efforts. EPA will continue to provide analytical and scientific support for environmental forensics to ensure compliance with environmental laws, especially in overburdened, underserved, or vulnerable communities. Additionally, EPA will support critical climate change initiatives, including forensics support of climate change enforcement efforts both in civil and criminal enforcement. This is vital to EPA's ability to enforce the hydrofluorocarbons (HFCs) phase down regulations which are imperative to reducing climate impacts. NEIC will be making significant investments to assist with HFC-related enforcement capabilities, including inspector training, acquisition of field sampling equipment, and expansion of laboratory analytical capabilities to the meet the urgent demand for highly complex HFC analysis.

Effective enforcement relies on the best available science. In FY 2023, NEIC will strengthen our clean air and water protections, aligned with the Administration's goals to hold polluters accountable for their actions and deliver environmental justice (EJ) in communities across America. To achieve these goals, the Agency will employ NEIC's environmental forensics expertise to investigate violations of environmental statutes and prosecute environmental crimes in communities that are disproportionally affected by pollution and environmental crime, and to target those areas more effectively. NEIC supports EJ by targeting critical industry inspections in overburdened, underserved, or vulnerable communities, and utilizes the data we collect to work with the EPA regional office to take enforcement action that could ultimately improve air and water quality in such communities.

In FY 2023, NEIC will continue to streamline its forensics work and identify enhancements to the Agency's sampling and analytical methods, using existing and emerging technology. The NEIC also will build on its previous progress to maximize the efficiency and effectiveness of its operations, ensure timely completion of civil inspection reports, improve procurement processes, and continue to identify and implement further efficiencies in laboratory operations. Of paramount importance, NEIC will build on the work completed in FY 2021 and FY 2022 to support criminal and civil program efforts to combat climate change. The results of these efforts will inform EPA's work in FY 2023 and beyond.

The NEIC will seek to grow its support of EPA enforcement and compliance assurance programs. During FY 2019 and FY 2020, the NEIC accepted over 220 requests from all 10 EPA regions for technical enforcement support. In addition, the NEIC provided testimony and expert reports in support of over 28 cases covering a variety of highly technical areas.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$484.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$1,048.0 / +1.3 FTE) This program increase will ensure EPA has the capacity and technical expertise to investigate, analyze, sample, test, and transport HFCs. The increase in FTE will allow EPA analysts to research, assess, and coordinate with federal partners, private industry, and task force members. This investment includes \$229.0 thousand for payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Act to Prevent Pollution from Ships (MARPOL Annex VI); Asbestos Hazard Emergency Response Act; Clean Air Act; Clean Water Act; Emergency Planning and Community Right-to-Know Act; Federal Insecticide, Fungicide, and Rodenticide Act; Marine Protection, Research, and Sanctuaries Act; Mercury-Containing and Rechargeable Battery Management Act; Noise Control Act; Oil Pollution Act; Resource Conservation and Recovery Act; Rivers and Harbors Act; Safe Drinking Water Act; Small Business Regulatory Enforcement Fairness Act; Toxic Substances Control Act; American Innovation and Manufacturing Act.

Homeland Security

Homeland Security: Critical Infrastructure Protection

Program Area: Homeland Security Goal: Safeguard and Revitalize Communities Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$733	\$909	\$1,014	\$105
Science & Technology	\$9,653	\$10,380	\$14,526	\$4,146
Total Budget Authority	\$10,386	\$11,289	\$15,540	\$4,251
Total Workyears	23.7	26.6	32.6	6.0

Program Project Description:

Under the federal homeland security system, EPA is the Sector Risk Management Agency responsible for implementing statutory and Presidential directives relating to homeland security for the water sector. EPA's Water Security Program is implemented through close partnerships with the water sector, state emergency response and water program officials, and other federal agencies—most notably the Department of Homeland Security (DHS), the United States Army Corps of Engineers, and the Intelligence Community. The Water Security Program engages federal, state, and local entities in defining annual objectives and identifying high priorities for immediate action.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the FY 2022 - 2026 EPA Strategic Plan. The program also will support the Agency's Infrastructure Investment and Jobs Act implementation priorities including preparing for and responding to cybersecurity challenges so that water systems are more resilient.

This program provides critical resources to coordinate and support protection of the Nation's critical water infrastructure from terrorist threats and all-hazard events. In FY 2023, EPA will continue to provide exercises and technical support to about 1,500 water utilities, state officials, and federal emergency responders to become more resilient to any natural or manmade incident that could endanger drinking water and wastewater services, with an emphasis on the threats posed by climate change and cybersecurity. EPA will provide tools, exercises, and technical assistance which will address the highest risks confronting the water sector. In providing this assistance, EPA will seek to engage overburdened and underserved communities, some of which may lack the technical capacity and resources to undertake preparedness and response actions in the absence of such external support.

Natural Disasters, Climate Change, and General Preparedness

Drought, floods, hurricanes, and other natural disasters represent a high risk to the water sector owing to their frequency of occurrence, their enormous potential for destruction, and the exacerbating effects of climate change. As evident from several recent natural disasters, the level of preparedness within the water sector varies significantly—with many utilities lacking adequate preparedness capabilities. In FY 2023, EPA will improve the preparedness of the water sector by providing nationwide exercises and technical support to address natural disasters and general preparedness with the objective to train water and wastewater systems, state officials, and emergency response partners.

Climate change and associated extreme weather events directly threaten water systems' ability to fulfill their public health and environmental missions as evident from the devastation borne by events like Superstorm Sandy. The EPA Creating Resilient Water Utilities (CRWU) initiative advances the long-term sustainability of the water sector by enabling utility owners and operators to integrate climate change considerations into their routine planning practices. CRWU provides innovative, but readily accessible, electronic tools that enable water systems to adapt to climate change and enhance their resiliency.

Specifically, EPA will:

- Provide in-person or virtual exercises, workshops, and technical assistance to the water sector, including Incident Command System / National Incident Management System exercises; drought response; flood response; state functional exercises (e.g., scenarios of hurricanes, floods, and earthquakes); resource typing and site access workshops; and regional interstate emergency response exercises (e.g., hurricane).
- Integrate new climate projection data into the flagship climate risk assessment tool, Climate Resilience Evaluation and Awareness Tool (CREAT), which incorporates the latest projection data for precipitation, temperature, sea-level rise, storm surge components, and hydrologic changes. EPA will continue to provide extensive nationwide training sessions for drinking water and wastewater systems as well as a series of train-the-trainer forums for technical assistance providers to reach smaller utilities, with a significant focus on overburdened and underserved communities. EPA also will provide direct technical assistance to large, medium, and small drinking water and wastewater utilities across the country in the application of CREAT and other CRWU tools.
- Support the water sector in preparing for and responding to supply chain disruptions that have the potential to impact the availability of water treatment chemicals and other critical materials needed for drinking water and wastewater system operation by: 1) reviewing and processing applications submitted under the authorities of SDWA 1441 and the Defense Production Act; 2) providing direct technical assistance to water systems, state primacy agencies, and other water sector stakeholders experiencing supply challenges that could not be solved through local efforts; 3) assessing the supply chain for critical water treatment chemicals in order to assess the risk of disruptions that could impact the water sector; and

- 4) developing a platform for tracking and sharing information about emerging and ongoing supply chain issues with the potential to impact water system operations.
- Conduct tabletop and functional exercises to improve the operation of intra-state and interstate mutual aid agreements among water utilities.
- Implement lessons learned from the most recent hurricane seasons, as identified by reports from the Department of Homeland Security's Federal Emergency Management Agency, the Water Agency Response Network, and EPA's Inspector General.
- Continue to address high priority security areas, as identified in the stakeholder generated 2017 Roadmap to a Secure and Resilient Water and Wastewater Sector, 77 with an emphasis on the following four priorities: 1) establishing the critical lifeline status of the drinking water and wastewater sector and translating that definition into strong support for the sector's needs and capabilities; 2) improving detection, response, and recovery to contamination incidents; 3) advancing preparedness and improving capabilities of the drinking water and wastewater sector for area-wide loss of water and power; and 4) advancing recognition of vulnerabilities and needed responses related to cybersecurity risk management.
- Conduct nationwide exercises with three critical, inter-dependent sectors: healthcare, emergency services, and energy. Most incidents, particularly natural disasters, have underscored the mutual reliance on the water sector with other lifeline sectors. Through exercises and technical support with officials at the local, state, and federal levels from these other sectors, EPA will seek to improve coordination among critical lifeline sectors.
- Sustain operation of the Water Desk in the Agency's Emergency Operations Center in the event of an emergency by updating roles and responsibilities, training staff in the incident command structure, ensuring adequate staffing during activation of the desk, and coordinating with EPA's regional field personnel and response partners.
- Develop annual assessments, as required under the National Infrastructure Protection Plan, 78 to describe existing water security efforts and progress in achieving the sector's key metrics.

Water Security Initiative (WSI) and Water Laboratory Alliance (WLA)

Water Security Initiative. WSI addresses the risk of contamination of drinking water distribution systems. It has designed and developed an effective system for timely detection and appropriate response to drinking water contamination threats and incidents through a pilot program that has broad application to the Nation's drinking water utilities in high-threat cities. The FY 2023 request includes \$4.8 million for necessary WSI Surveillance and Response System (SRS) activities to: 1) continue refining technical assistance products based on the five full-scale SRS pilots; 2)

https://www.waterisac.org/sites/default/files/public/2017 CIPAC Water Sector Roadmap FINAL 051217.pdf.

⁷⁷For more information, please see:

⁷⁸ For more information, please see: https://www.cisa.gov/national-infrastructure-protection-plan.

implement a monitoring and response program for water utilities focused on source water chemical spills; and 3) provide direct technical assistance, as requested by water utilities, that seeks to leverage EPA's expertise in deploying their own warning system.

In FY 2023, EPA will:

- Continue efforts to promote the water sector's adoption of Water Quality Surveillance and Response Systems (WQ-SRS). EPA will facilitate user forums and promote the use of available tools and material to design and implement a WQ-SRS. These capabilities will help water systems rapidly detect and respond to water quality problems, such as contamination in the distribution system, to reduce public health and economic consequences.
- Build upon the Drinking Water Mapping Application to Protect Source Waters (DWMAPS)⁷⁹ and the new chemical spill and storage notification requirements in the America's Water Infrastructure Act of 2018 (AWIA). EPA will continue to collaborate with water sector stakeholders, water utilities, and state environmental agencies, to identify specific information (e.g., what chemicals are stored upstream from a surface water intake), including Emergency Planning and Community Right-to-Know Act (EPCRA) Tier 2 data, that is valuable to creating a comprehensive source water contamination threat inventory. EPA will develop guidance and a comprehensive listing of state and federal information resources that can be used to identify potential sources of contamination. This effort will help to ensure that drinking water utilities have access to the basic information (e.g., what chemicals are stored upstream from a surface water intake) necessary for understanding the risk of releases to their sources of drinking water, as required under AWIA Section 2013, and take steps to mitigate those risks.
- Provide technical support to EPA regions, state primacy agencies, and water systems during response to contamination incidents. EPA's Water Program has been providing technical assistance on contamination response for several years (e.g., following wildfires, following the jet fuel contamination incident in Honolulu, Hawaii) and anticipates that requests for this type of support will continue.
- Support water sector assessments of contamination detection and response capabilities through direct assessments of online water quality monitoring capabilities. EPA also will promote the SRS Capabilities Assessment Tool, an easy to use, web-based, decision support tool that presents the user with a series of questions to assess existing detection and response capabilities, compare these existing capabilities to a target capability, and identify potential enhancements to address gaps between the existing and target capabilities.
- Continue the successful SRS implementation pilot program⁸⁰ within the water sector. The purpose of the SRS Program is to: demonstrate the application of SRS tools in designing and operating an early warning system for contamination events; illustrate additional

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⁷⁹ For more information, please see: https://www.epa.gov/sourcewaterprotection/drinking-water-mapping-application-protect-source-waters-dwmaps.

⁸⁰ For more information, please see: https://www.epa.gov/waterqualitysurveillance.

applications of SRS tools, such as extending the SRS approach to source water monitoring; and identify champions, within the water sector, for implementing surveillance and response systems.

Water Laboratory Alliance (WLA). In a contamination event, the sheer volume or unconventional type of samples requiring analysis could quickly overwhelm the capacity or capability of a single laboratory. To address this potential deficiency, EPA has established the national WLA comprised of laboratories from the local (e.g., water utility) to the federal level (e.g., the Centers for Disease Control and Prevention's Laboratory Response Network). In FY 2023, EPA will continue to promote, through exercises, expert workshops, and association partnerships, the WLA Plan. ⁸¹ The plan provides a protocol for coordinated laboratory response to a surge of analytical needs. Approximately 30 exercises or workshops will be completed in FY 2022. In FY 2023, under WLA, EPA plans to train approximately 50 laboratories to improve their ability to handle potential problems associated with surge capacity and analytical method capabilities during an emergency.

In FY 2023, EPA will:

- Continue to work with regional and state environmental laboratories to conduct exercises and continue efforts to automate the exercises, enabling laboratories and other members of the water sector to participate in exercises simultaneously and continue the innovative practice of pursuing validation of methods through exercises.
- Continue to expand the membership of the WLA with the intention of achieving nationwide coverage. The WLA has 160 member laboratories that are geographically diverse and can provide a wide range of chemical, biological, and radiological analyses. 82 For the WLA to become a robust network that can cover major population centers and address a diverse array of high priority contaminants, membership must continue to increase.
- Develop protocols for flushing contaminated premise plumbing systems that are based on the best available science and validated through both pilot-scale demonstration and computer simulation. Response to previous water contamination incidents has demonstrated inconsistent approaches to flushing premise plumbing systems, some of which could spread contamination further into the system. Science-based protocols that are adaptable to the specific conditions of an incident are important for responding to a range of distribution system contamination incidents, including release of volatile organic chemicals following exposure of pipe to high temperatures (e.g., as experienced during wildfires).
- Continue to implement specific recommendations of the Water Decontamination Strategy as developed by EPA and water sector stakeholders (e.g., defining roles and responsibilities of local, state, and federal agencies during an event).

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⁸¹ For more information, please see: https://www.epa.gov/waterlabnetwork.

⁸² For more information, please see: https://www.epa.gov/dwlabcert/contact-information-certification-programs-and-certified-laboratories-drinking-water.

Cybersecurity

Cybersecurity represents a substantial concern for the water sector, given the ubiquitous access to critical water treatment systems from the internet. Recent attacks by outside actors and their clear potential to disrupt essential lifeline services, such as drinking water supplies, are prompting a growing recognition that the federal government should adopt a more aggressive posture towards cybersecurity. EPA will continue working with each state, territory, and tribe to develop and train a cadre of technical assistance providers who can work directly with individual water systems to assess and enhance their cybersecurity practices. This multi-year effort requires EPA to work with the Nation's 52,000 community water systems, many of which have limited or no technical capacity to address cybersecurity issues. EPA also will seek to integrate cybersecurity training into their sanitary survey assessments.

In addition to expanding direct technical assistance, and in discussions with the National Security Council, EPA is exploring regulatory and statutory options in the near-term for improving the water sector's cybersecurity posture.

In FY 2023, EPA will continue to fulfill its obligations under Executive Order 13636: *Improving Critical Infrastructure Cybersecurity*,⁸³ which designated EPA as the lead federal agency responsible for cybersecurity in the water sector. EPA will partner with the water sector to promote cybersecurity practices and gauge progress in the sector's implementation of these practices as directed by the Cybersecurity Enhancement Act of 2014. EPA will be conducting nationwide exercises and providing technical support on cybersecurity threats and countermeasures for about 200 water and wastewater utilities.

In FY 2023, EPA will evaluate its existing Cybersecurity Action Plan, as informed by recent discussions under the auspices of the National Security Council. The Agency also will review other strategic planning documents pertaining to the water sector to identify and clarify any opportunities to enhance the Agency's mission to improve the cybersecurity posture of the sector. Additionally, EPA's Office of Water and Office of Homeland Security will continue to develop an integrated strategy to work together more effectively to coordinate drinking water and wastewater sector-wide cybersecurity threat information and intelligence sharing efforts.

EPA will:

• Pursuant to regulatory and statutory requirements, EPA intends to issue guidance documents and conduct a national training program for states on evaluating cybersecurity practices at public water systems. In addition, EPA expects to provide corresponding guidance materials and training to help public water systems understand and strengthen the cybersecurity practices that may be assessed during a state survey and/or as a result of future statutory requirements. EPA plans to offer targeted training on the guidance documents to all public water systems and all states.

⁸³ For more information, please see: https://www.dhs.gov/publication/executive-order-13636-improving-critical-infrastructure-cybersecurity.

- Continue to expand the Cybersecurity Technical Assistance Provider Initiative, an effort
 which recognizes that many water systems, particularly rural and small systems and
 systems in underserved and overburdened communities, will not adopt cybersecurity
 practices without direct assistance. This effort trains a cadre of state and regional water
 sector technical assistance providers to assess cybersecurity practices at water and
 wastewater systems and guide systems through developing a cybersecurity action plan to
 reduce risks and enhance resilience.
- As required by Section 50113 of the Drinking Water and Wastewater Infrastructure Act of 2021, EPA, beginning in FY 2022, will develop an annual Cybersecurity Prioritization Framework to identify water systems whose disruption would lead to significant public health impacts. Based upon the Prioritization Framework, EPA will need to develop and implement a cybersecurity technical support plan for these systems.
- In FY 2022, EPA launched the Industrial Control Systems Cybersecurity Initiative Water and Wastewater Sector Action Plan to promote and support the water sector's adoption of strategies for the early detection of cyber-threats and allow for the rapid sharing of cyberthreat data across the government to expedite analyses and action. This initiative will continue into FY 2023.
- Conduct classroom exercises, at locations across the country, on water sector cybersecurity. The exercises will address cybersecurity threats (including ransomware), vulnerabilities, consequences, best practices, and incident response planning.
- Update and/or develop new course materials to respond to the evolving nature of cybersecurity threats. One example of such updates are the FY 2022 alerts and training concerning the potential for Russian-state actors to infiltrate water system industrial control processes and business enterprise functions.

AWIA

In FY 2023, EPA will continue its efforts to fulfill the mandates of the Community Water System Risk and Resilience section of AWIA. It requires community water systems, serving more than 3,300 people, to prepare risk assessments and emergency response plans. EPA will provide technical assistance to these systems on how to conduct risk and resilience assessments (RRAs), prepare Emergency Response Plans (ERPs), and certify completion of these assessments and plans. In FY 2022, EPA completed four trainings on preparation of RRAs and ERPs. Additionally, 100 percent of large systems, 100 percent of medium systems, and 89 percent of small systems have certified the completion of their RRAs, while over 99 percent of large systems, over 99 percent of medium systems, and over 82 percent of small systems have certified the completion of their ERPs. EPA also will provide technical assistance to water systems to address drinking water vulnerabilities where EPA determines an urgent and immediate need exists.

Performance Measure Targets:

(PM DW-07) Number of drinking water and wastewater systems, tribal and	FY 2022	FY 2023
state officials, and water sector partners provided with security, emergency	Target	Target
preparedness, and climate resilience training and technical assistance.	2,000	2,000

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$238.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$3,908.0 / +6.0 FTE) This program change is an increase of resources and FTE to enhance cyber incident preparation, response, recovery, information sharing, and intelligence for water utilities to protect infrastructure. This includes \$1.072 million in payroll.

Statutory Authority:

Safe Drinking Water Act, §§ 1431-1435; Clean Water Act; Public Health Security and Bioterrorism Emergency and Response Act of 2002; Emergency Planning and Community Right-to-Know Act, §§ 301-305.

Homeland Security: Preparedness, Response, and Recovery

Program Area: Homeland Security
Goal: Safeguard and Revitalize Communities
Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Science & Technology	\$21,877	\$24,852	\$25,890	\$1,038
Hazardous Substance Superfund	\$31,897	\$33,020	\$43,796	\$10,776
Total Budget Authority	\$53,774	\$57,872	\$69,686	\$11,814
Total Workyears	127.2	124.1	125.8	1.7

Program Project Description:

Exposure to hazardous chemical agents, microbial pathogens, and radiological materials released into the environment could pose catastrophic consequences to the health of first responders and American citizens. EPA has responsibility, under legislation and Presidential Directives, to remediate contaminated environments created by incidents such as terrorist attacks, industrial accidents, or natural disasters.

EPA's disaster-related research responsibilities under the Homeland Security Research Program (HSRP) are: 1) contaminant characterization and consequence assessment; 2) environmental cleanup and infrastructure remediation; and 3) systems approaches to preparedness and response.

The research conducted supports EPA to carry out its primary mission essential function to help communities prepare for, endure, and recover from disasters – safeguarding their economic, environmental, and social well-being. Researchers within the HSRP collaborate with state, local, tribes, private sector organizations, and key federal agencies⁸⁴ to prioritize research needs and prevent the duplication of scientific and technical work. The HSRP delivers effective tools, methods, information, and guidance to local, tribal, state, and federal decision-makers that address both critical terrorism-related issues and natural or manmade disasters.

EPA also is responsible for operating and maintaining the network of near real-time radiation monitors, known as *RadNet*, under the Nuclear/Radiological Incident Annex to the National Response Framework. This network is critical in responding to large-scale incidents such as the accident at the Fukushima nuclear facility and is an EPA Critical Infrastructure/Key Resource asset. This monitoring network is supported by the IT system known as ARaDS, the Analytical Radiation Data System.

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⁸⁴ Partners include: Department of Homeland Security (DHS), Department of Defense (DOD), Centers for Disease Control and Prevention (CDC), Federal Bureau of Investigation (FBI), National Institute of Health (NIH), National Science Foundation (NSF), Department of Energy (DOE), and Department of Agriculture (USDA).

Recent Accomplishments Include:85

Supporting COVID-19 Response. EPA researchers worked with program and regional office partners and with other federal, state, and local stakeholders (including CDC, DHS, the New York City Metro Transit Authority, the Los Angeles Metro, and many others) to provide timely and reliable information to address Agency and stakeholder research needs related to COVID-19. The research and technical support provided was used by EPA and other stakeholders to make informed decisions, develop federal guidance, and support strategies and investments. The research focused on determining the effectiveness of:

- Available products and methods for cleaning and disinfecting real-world surfaces
- UV-C systems and ozone generation devices for surface disinfection
- Technologies to reduce airborne transmission
- New analytical approaches for environmental samples that reduce time for analyses results
- Ways to routinely disinfect common personal protective equipment such as masks, face shields, and clothing

EPA regularly updated and communicated research findings to a wide audience via webinars (with attendance in the thousands) with interim results posted on the EPA COVID-19 research website. 86 The Agency also held regular meetings with federal, tribal, state, and local governments.

Improving Preparedness for Bio-incident Response. EPA researchers significantly advanced capabilities to respond to a biological incident. Environmental sampling is critical for effective response to bio-incidents, specifically to address persistent biological agents like Bacillus anthracis spores or other pathogens that can survive or propagate in the environment (e.g., in biofilm or other host vectors). Various sampling methods were developed and evaluated to characterize potentially contaminated indoor sites and support cleaning. 87,88,89 EPA researchers developed methods to effectively sample complex, outdoor environmental surfaces for the presence of biological threats (specifically, B. anthracis spores) and developed tools to generate incident specific characterization strategies (Trade-Off Tool for Sampling, TOTS). 90 These methods, tools, and information will help responders determine which sampling methods to consider for their specific situation and develop the most effective sampling strategies to protect human health.

Improving Wastewater Infrastructure Preparedness. Wide area outdoor contamination incidents, whether they be chemical, biological, or radiological, can be intensified by rain events. Rainfall can wash contamination over outdoor areas, or into stormwater, or combined wastewater systems, which increases the contaminated area. Management of contaminated water is often an afterthought when first responding to a natural or human caused disaster. To help stormwater managers fulfill their emergency response responsibilities within the United States' National Incident

⁸⁵ For a more complete view of accomplishments, please see: https://www.epa.gov/research/national-research-programs.

⁸⁶ For more information, please see: https://www.epa.gov/covid19-research.

⁸⁷ For more information, please see: https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryId=352037&Lab=CESER.

⁸⁸ For more information, please see: https://cfpub.epa.gov/si/si public record Report.cfm?dirEntryId=352038&Lab=CESER.

⁸⁹ For more information, please see: https://cfpub.epa.gov/si/si public record Report.cfm?dirEntryId=352040&Lab=CESER.

⁹⁰ For more information, please see: https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryId=350224&Lab=CESER.

Management System, 91 EPA researchers developed a method to help them make decisions about the allocation of containment and treatment resources within an impacted area.

Additionally, it is unknown how radionuclides, which are radioactive forms of elements, interact with stormwater or combined sewage collection system infrastructure, but long-term persistence and release could have significant impacts on wastewater operations. Data generated during a study by EPA researchers on the persistence and fate and transport of radionuclides will help wastewater utilities make decisions about treating, storing, or diverting contamination after a radionuclide contamination incident that affects their systems. 92

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the FY 2022-2026 EPA Strategic Plan.

Research is planned and prioritized based on the needs of end-users of this science, including Regional On-Scene Coordinators, water utility companies, states, and EPA program and regional offices.

Contaminant Characterization and Risk Assessment. Contaminant characterization provides essential information that helps determine the extent and nature of an environmental contamination and plan effective response actions. Information on contaminant characterization, coupled with an understanding of exposure potential, can be used to inform the potential consequences of a contamination on public health. Furthermore, understanding the fate and transport of contaminants in the environment will ensure proper contaminant characterization. Following chemical, biological, and radiological incidents, EPA may support or lead site characterization, remediation, and management of waste in the contaminated environment. Additional characterization of the site may be required during cleanup operations to assess progress and determine waste streams and to inform site re-occupancy and reuse decisions (sometimes referred to as clearance decisions).

In FY 2023, HSRP will:

- Conduct research to understand the transport of communicable disease agents, including consideration of impacts as a function of social, economic, and environmental vulnerabilities.
- Develop rapid and widely available sample collection methods for indoor and outdoor environmental matrices for target biological and chemical agents.
- Develop sampling strategy and data management tools for wide-area chemical and biological incidents for urban wide-area environments. These tools will incorporate data

⁹¹ For more information, please see:

https://cfpub.epa.gov/si/si_public_record_report.cfm?dirEntryId=350959&Lab=CESER&subject=Homeland%20Security%20Research&view=desc&sortby=pubDateYear&showcriteria=1&count=25&searchall=%27homeland%20security%27%20AND%20%27water%20security%27%20NOT%20(presentation%20OR%20poster)&datebeginpublishedpresented=01/01/2003.

⁹² For more information, please see:

 $[\]frac{\text{https://cfpub.epa.gov/si/si_public_record_report.cfm?dirEntryId=351297\&Lab=CESER\&subject=Homeland\%20Security\%20Research\&view=desc\&sortby=pubDateYear\&showcriteria=1\&count=25\&searchall=\%27homeland\%20security\%27\%20AND\%20\%27water\%20security\%27\%20NOT\%20(presentation\%20OR\%20poster)\&datebeginpublishedpresented=01/01/2003.$

layers enabling assessment of environmental justice factors to inform response decision making.

Environmental Cleanup and Infrastructure Remediation. Remediating chemical, biological, and radiological contamination released over wide areas including indoor and outdoor areas, critical infrastructures, or impacted water systems, is a responsibility for which EPA needs to accumulate operational experience. Such a release can pose a continual challenge with long-standing consequences. Chemical, biological, and radiological environmental contamination that can impact human health and welfare can result from intentional acts or from the increasing severity and occurrence of natural disasters due to climate change. HSRP research aims to fill the most critical scientific gaps in the capabilities of EPA's response community so that the Agency can make the most informed mitigation and remediation decisions. As the lead federal agency overseeing the water sector, EPA addresses water sector research needs identified by the Water Sector Coordinating Council and the Water Government Coordinating Council's Critical Infrastructure Partnership Advisory Council.⁹³

In FY 2023, HSRP will:

- Develop decontamination methods for biological agents that can effectively minimize the risk of transmission from environmental matrices, including research useful to support reducing environmental transmission in pandemic or other naturally occurring outbreaks;
- Develop decontamination methods for chemical agent contaminated areas, including methods for non-traditional agents and opioids;
- Conduct cybersecurity research to assess the impact a cyberattack will have on the drinking water infrastructure;
- Evaluate water system security and assess resilience for wastewater, stormwater, and home plumbing;
- Assess the impact of high consequence pathogens on wastewater treatment plant operations; and
- Develop integrated waste management tools for all hazards with enhancements to estimate
 waste volumes and social implications of disaster waste and materials management. These
 tools will incorporate environmental justice data to inform decision making. These tools
 are developed to be applicable to debris from intentional incidents as well as natural
 disasters.

Community Engagement and Systems-Based Tools Supporting Resilience Equity. Transitioning research into reliable and field usable capabilities involves ensuring that decision makers and responders have knowledge of and access to the latest information. Effective technical support and decision-support tools will be developed to ensure that information is readily and easily accessible to decision makers and stakeholders throughout response and recovery efforts. In FY 2023, HSRP will:

⁹³ The Water Sector Coordinating Council is a "self-organized, self-run, and self-governed council" composed of water utilities.

The Water Government Coordinating Council is responsible for interagency coordination of efforts related to the water sector.

- Develop decision-support tools and resources to improve environmental justice, community resilience, risk communication, risk perception, and human behavior during disaster preparedness, response, and recovery; and
- Develop a data management tool to enhance data usability and availability for wide area response and recovery from natural and man-made disasters.

Radiation Monitoring. The RadNet fixed monitoring network provides near real-time radiation monitoring coverage near each of the 100 most populous U.S. cities, as well as expanded geographic coverage for a total of 140 monitoring sites. The RadNet air monitoring network provides the Agency, first responders, and the public with greater access to data. Should there be a radiological emergency, RadNet improves officials' ability to make decisions about protecting public health and the environment during and after the incident. Additionally, RadNet data is used by scientists to better characterize the effect of a radiological incident.

In FY 2023, the Agency will continue to operate the *RadNet* air monitoring network, continue to add exposure rate meter capability to the network, and provide essential maintenance to the network. To best maximize resources, exposure rate meter capability will be added to monitors when needed repairs are called for. This expansion will enhance the federal government's ability to effectively communicate radiation measurement information to the public and to non-technical decision makers after a radiological release. In addition to aiding in explaining data to the public and decision makers, the addition of exposure rate meters aligns EPA's monitoring system with that of the international community.

Research Planning. EPA research is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is planned with their active involvement. Each research program is in the process of developing the fourth generation of the StRAPs, which will continue the practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

EPA's Research and Development Program, ORD, ensures the integrity and value of its research through a variety of mechanisms that include:

- EPA's Board of Scientific Counselors (BOSC)
 - ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.
- State Engagement
 - EPA's state engagement⁹⁴ is designed to inform states about their role within EPA and EPA's research programs and to better understand the science needs of state environmental and health agencies.
- Tribal Partnerships

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⁹⁴ For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

Key Tribal partnerships are established through the Tribal Science Program which
provides a forum for the interaction between Tribal and Agency representatives.
These interactions identify research of mutual benefit and lead to collaborations on
important tribal environmental science issues.

Performance Measure Targets:

Work under this program supports performance results in the Research: Chemical Safety and Sustainability Program under the S&T appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$964.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$228.0) This change to fixed and other costs is a decrease due to the recalculation of lab fixed costs.
- (+\$306.0 / + 1.7 FTE) This program change is an increase in resources and FTE to support research efforts to identify and address emerging threats to the water sector. This includes \$300.0 thousand in payroll.
- (-\$4.0) This program change is a decrease in resources for radiological emergency preparedness.

Statutory Authority:

Atomic Energy Act of 1954; Clean Air Act, §§ 102, 103; Safe Drinking Water Act, §§ 1431-1435, 1442; Robert T. Stafford Disaster Relief and Emergency Assistance Act; National Defense Authorization Act for Fiscal Year 1997, §§ 1411-1412; Public Health Security and Bioterrorism Preparedness and Response Act of 2002; Toxic Substances Control Act, § 10; Oil Pollution Act; Pollution Prevention Act; Resource Conservation and Recovery Act; Emergency Planning and Community Right-to-Know Act; Clean Water Act; Federal Insecticide, Fungicide, and Rodenticide Act; Federal Food, Drug, and Cosmetic Act; Food Quality Protection Act; Food Safety Modernization Act, §§ 203, 208.

Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security Goal: Safeguard and Revitalize Communities Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$4,915	\$4,959	\$5,139	\$180
Science & Technology	\$500	\$501	\$501	\$0
Building and Facilities	\$7,006	\$6,676	\$6,676	\$0
Hazardous Substance Superfund	\$845	\$1,030	\$1,530	\$500
Total Budget Authority	\$13,266	\$13,166	\$13,846	\$680
Total Workyears	9.2	9.2	9.2	0.0

Total workyears in FY 2023 include 9.2 FTE to support Homeland Security Working Capital Fund (WCF) services.

Program Project Description:

This program supports activities to ensure that EPA's physical structures and assets are secure and operational and that physical security measures are in place to help safeguard staff in the event of an emergency. These efforts also protect EPA's vital laboratory infrastructure and testing assets. Specifically, funds within this appropriation support security needs for the National Vehicle and Fuel Emissions Laboratory (NVFEL).

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Agency will continue to provide enhanced physical security for the NVFEL, its employees, visitors, and test articles, which include prototype vehicles and engines. This funding supports the cost of security enhancements required as part of an Agency security assessment review.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• There is no change in program funding.

Statutory Authority:

Intelligence Reform and Terrorism Prevention Act of 2004; Homeland Security Act of 2002; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Indoor Air and Radiation

Indoor Air: Radon Program

Program Area: Indoor Air and Radiation Goal: Ensure Clean and Healthy Air for All Communities Objective(s): Reduce Exposure to Radiation and Improve Indoor Air

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$2,224	\$3,136	\$5,004	\$1,868
Science & Technology	\$112	\$157	\$157	\$0
Total Budget Authority	\$2,336	\$3,293	\$5,161	\$1,868
Total Workyears	8.8	9.0	12.4	3.4

Program Project Description:

Title III of the Toxic Substances Control Act (TSCA) authorizes EPA to take a variety of actions to address the public health risks posed by exposures to indoor radon. Under the statute, EPA studies the health effects of radon, assesses exposure levels, sets an action level, provides technical assistance to States, industry and the public, advises the public on steps they can take to reduce exposure and promotes the availability of reliable radon services and service providers to the public.

Radon is the second leading cause of lung cancer in the United States – and the leading cause of lung cancer mortality among non-smokers – accounting for about 21,000 deaths per year. ⁹⁵ The EPA's non-regulatory Indoor Air: Radon Program promotes actions to reduce the public's health risk from indoor radon. EPA and the Surgeon General recommend that people conduct a simple home radon test and, if levels above the EPA's guidelines are confirmed, reduce elevated levels by home mitigation using inexpensive and proven techniques. EPA also recommends that new homes be built using radon-resistant features in areas where there is elevated radon. Nationally, risks from radon have been reduced in many homes over the years, but many are still in need of mitigation. This voluntary program promotes partnerships between national organizations, the private sector, and more than 50 state, local, and tribal governmental programs to reduce radon risk.

This program, combined with the Indoor Air: Radon EPM Program, supports the EPA Radon Reference and Intercomparison Program (ERRIP) of the National Air and Radiation Environmental Laboratory (NAREL) in Montgomery, Alabama. The ERRIP is the only federal National Institute of Standards and Technology (NIST) traceable primary radon reference and calibration program accessible to the U.S. radon industry and is a critical element of the framework for promoting the availability of reliable, quality radon services for the public.

⁹⁵ For more information, please see: https://www.epa.gov/radon.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the FY 2022 - 2026 EPA Strategic Plan.

EPA will provide radon reference intercomparison samples to secondary radon chambers (known as ERRIP participants) operating in the United States to analyze. EPA then submits the radon reference data to the Radon Accrediting Board(s) to evaluate and assess the performance of the ERRIP participant. EPA will update and modernize program equipment and perform required QA/QC on program analytical process and procedures.

Performance Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• There is no change in program funding.

Statutory Authority:

Title III of the Toxic Substances Control Act (TSCA).

Radiation: Protection

Program Area: Indoor Air and Radiation Goal: Ensure Clean and Healthy Air for All Communities Objective(s): Reduce Exposure to Radiation and Improve Indoor Air

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$8,283	\$7,661	\$10,588	\$2,927
Science & Technology	\$1,645	\$1,735	\$2,224	\$489
Hazardous Substance Superfund	\$1,973	\$1,985	\$2,872	\$887
Total Budget Authority	\$11,901	\$11,381	\$15,684	\$4,303
Total Workyears	60.0	53.8	66.7	12.9

Program Project Description:

EPA supports waste site characterization and cleanup by providing field and fixed laboratory environmental radiological and radioanalytical data and technical support, providing radioanalytical training to state and federal partners, and developing new and improved radioanalytical methods and field measurement technologies. In the event of a radiological accident or incident, the National Analytical Radiation Environmental Laboratory in Montgomery, Alabama, and the National Center for Radiation Field Operations in Las Vegas, Nevada, provide analytical and field operation support for radioanalytical testing, quality assurance, analysis of environmental samples, and field measurement systems and equipment to support site assessment, cleanup, and response activities. Support to these sites, including those disproportionately impacted by environmental justice issues, is based on requests from EPA and the Regions. Together, these organizations provide technical support for conducting site-specific radiological characterizations and cleanups.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA, in cooperation with states, tribes, and other federal agencies, will provide ongoing site characterization and analytical support for site assessment activities, remediation technologies, and measurement and information systems. EPA also will provide essential training and direct site assistance, including field surveys and monitoring, laboratory analyses, health and safety, and risk assessment support at sites with actual or suspected radioactive contamination.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$85.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$180.0) This change to fixed and other costs is a decrease due to the recalculation of lab utilities.
- (+\$584.0 / +2.2 FTE) This program change is an increase that supports addressing critical gaps in EPA's radiological protection capacity including the ability to provide ongoing site characterization and analytical support for site assessment activities, remediation technologies, and measurement and information systems. This investment includes \$384.0 thousand in payroll.

Statutory Authority:

Atomic Energy Act of 1954; Clean Air Act; Energy Policy Act of 1992; Nuclear Waste Policy Act of 1982; Public Health Service Act; Safe Drinking Water Act; Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978; Waste Isolation Pilot Plant Land Withdrawal Act of 1992; Marine Protection, Research, and Sanctuaries Act; Clean Water Act.

Radiation: Response Preparedness

Program Area: Indoor Air and Radiation Goal: Ensure Clean and Healthy Air for All Communities Objective(s): Reduce Exposure to Radiation and Improve Indoor Air

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$2,703	\$2,404	\$3,004	\$600
Science & Technology	\$3,063	\$3,096	\$4,383	\$1,287
Total Budget Authority	\$5,766	\$5,500	\$7,387	\$1,887
Total Workyears	32.1	33.3	41.4	8.1

Program Project Description:

The National Analytical Radiation Environmental Laboratory (NAREL) in Montgomery, Alabama, and the National Center for Radiation Field Operations (NCRFO) in Las Vegas, Nevada, provide laboratory analyses and field sampling and analyses to respond to radiological and nuclear incidents. This work includes measuring and monitoring radioactive materials and assessing radioactive contamination in the environment. This program comprises direct scientific field and laboratory activities to support preparedness, planning, training, and procedure development. In addition, program personnel are members of EPA's Radiological Emergency Response Team (RERT), a component of the Agency's emergency response program, and are trained to provide direct expert scientific and technical assistance. EPA's RERT is part of the Nuclear Incident Response Team under the Department of Homeland Security.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2023, EPA's RERT will provide critical support for federal radiological emergency response and recovery operations under the National Response Framework and the National Oil and Hazardous Substances Pollution Contingency Plan. When necessary, EPA's RERT will complement routine operations (e.g., on-site technical support/consultation, fixed laboratory, and mobile laboratory analyses) and provide for the rapid collection of field measurements/samples and accurate radionuclide analyses of environmental samples. ⁹⁶

In FY 2023, NAREL and NCRFO will build capacity in core levels of readiness for radiological emergency responses; participate in critical emergency exercises; and respond, as required, to radiological incidents. NAREL and NCRFO will prioritize rapid deployment capabilities to ensure that field teams and laboratory personnel are ready to provide scientific data, field measurement

⁹⁶ For additional information, please visit: https://www.epa.gov/radiation/radiological-emergency-response.

capabilities, analyses, and updated analytical techniques for radiation emergency response programs across the Agency.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$170.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$110.0) This change to fixed and other costs is an increase due to the recalculation of lab utilities.
- (+\$1,007.0 / +5.0 FTE) This program change is an increase to support activities for preparedness work, including basic laboratory analytic functions and field operations. This investment includes \$769.0 thousand in payroll.

Statutory Authority:

Homeland Security Act of 2002; Atomic Energy Act of 1954; Clean Air Act; Post-Katrina Emergency Management Reform Act of 2006 (PKEMRA); Public Health Service Act (PHSA); Robert T. Stafford Disaster Relief and Emergency Assistance Act; Safe Drinking Water Act (SDWA).

Reduce Risks from Indoor Air

Program Area: Indoor Air and Radiation Goal: Ensure Clean and Healthy Air for All Communities Objective(s): Reduce Exposure to Radiation and Improve Indoor Air

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$10,968	\$11,750	\$23,542	\$11,792
Science & Technology	\$296	\$161	\$173	\$12
Total Budget Authority	\$11,264	\$11,911	\$23,715	\$11,804
Total Workyears	40.8	37.2	68.1	30.9

Program Project Description:

Title IV of the Superfund Amendments and Reauthorization Act of 1986 (SARA) authorizes EPA to conduct and coordinate research on indoor air quality, develop and disseminate information, and coordinate risk reduction efforts at the federal, state, and local levels. Poor indoor air quality represents one of the largest risks in EPA's portfolio. PPA uses a range of strategies to reduce health risks from poor indoor air quality in homes, schools, and other buildings through partnerships with non-governmental, professional, federal, state and local organizations. Through these partnerships EPA provides information, guidance and technical assistance to equip industry, the health care community, the residential, school and commercial building sectors, and the general public to take action. As technical experts working at the intersection of the built environment and health, EPA is focused on policy and guidance to improve building conditions, including for disproportionately impacted communities, to reduce indoor air risk and achieve improvements in environmental and health outcomes.

Tribes have identified indoor air quality as a high priority and often bear disproportionately high impacts from poor indoor air quality. For example, Native Americans and Alaska Natives disproportionately suffer from asthma, in part due to poor housing conditions and the associated increase in exposure to indoor air pollutants.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the FY 2022 - 2026 EPA Strategic Plan.

Under this program, EPA will maintain indoor air monitoring and assessment equipment, conduct field measurements and assessments, and provide technical support and guidance for indoor air quality remediations, with a primary focus on assistance to tribal communities. In addition, EPA

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⁹⁷ For more information, please see: https://www.epa.gov/iaq.

will conduct training and capacity building for tribal air quality professionals on indoor air assessments and field measurement technology and practices, including radon.

Performance Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$11.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$1.0) This program change is an increase in support to restore capacity in the program including field measurements and assessments, technical support, capacity building, and training for tribal communities.

Statutory Authority:

Title IV SARA; Title III Toxic Substances Control Act; Clean Air Act.

IT / Data Management / Security

IT / Data Management

Program Area: IT / Data Management / Security Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$74,013	\$82,715	\$98,452	\$15,737
Science & Technology	\$2,782	\$3,072	\$3,195	\$123
Hazardous Substance Superfund	\$20,984	\$13,826	\$16,904	\$3,078
Total Budget Authority	\$97,779	\$99,613	\$118,551	\$18,938
Total Workyears	467.8	482.4	486.4	4.0

Total workyears in FY 2023 include 172.0 FTE to IT/Data Management working capital fund (WCF) services.

Program Project Description:

The work performed under the Information Technology/Data Management (IT/DM) Program supports human health and the environment by providing critical IT infrastructure and data management. Science and Technology (S&T) resources for EPA's IT/DM Program fund the following activities: Quality Program, ⁹⁸ EPA National Library Network, and One EPA Web.

The Quality Program provides quality policy, procedures, standards, and guidance for environmental information collection, production, evaluation, or use activities. These activities are performed by or for the Agency to ensure sound decisions are based on quality to support their intended use as we strive to protect human health and the environment. The Quality Program provides Quality Assurance (QA) directives, training, oversight, and technical support to assist EPA organizations in implementing their Quality Program for environmental information operations. It also oversees the implementation of EPA's Information Quality Guidelines (IQGs).

EPA's National Library Network provides information resources and services to EPA staff and the public in support of EPA's mission. One EPA Web provides accessible, relevant, timely, accurate, and complete environmental information to the public through EPA's internet pages, primarily https://www.epa.gov/.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

⁹⁸ For more information about EPA's Quality Program, please see: http://www.epa.gov/quality.

EPA's Quality Program provides support to all EPA organizations that have environmental information operations described in an approved Quality Management Plan (QMP) in implementing EPA's Quality Program. In FY 2023, the Quality Program will:

- Assess organizations that have an approved QMP and identify findings requiring corrective action, areas needing improvement, and leveraging best practices.
- Focus on promoting sound science and ensure scientific integrity by promoting better planning to produce improved environmental information. Evaluate environmental information through use of the QA Annual Report and Work Plan and annual certification by Assistant and Regional Administrators.
- Manage and provide oversight for the IQGs to ensure that information disseminated by or for EPA conforms with the Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility and Integrity of Information Disseminated by the Environmental Protection Agency criteria. The Quality Program will facilitate the development of the Agency's responses to public requests for correction and reconsideration of information disseminated by EPA and report this information to the Office of Management and Budget (OMB). The Quality Program also will continue to focus on implementing recommendations from the Office of Inspector General (OIG) Audit Report, EPA Needs to Address Internal Control Deficiencies in the Agencywide Quality System. The Program will give priority to implementation of revised Quality Directives for QMPs and Quality Assurance Project Plans, and the IQGs.
- Engage as a resource with EPA's state and tribal partners and environmental justice communities and support the Climate Change Program to ensure QA processes and procedures are in place to protect human health and the environment.

The Agency's S&T resources for IT/DM also will help provide library services through the EPA National Library Network to all EPA employees and environmental information access to the public, as well as support the hosting of EPA's websites and web pages. One EPA Web will continue to manage content and support internal and external users with information on EPA business, support employees with internal information, and provide a clearinghouse for the Agency to communicate initiatives and successes.

In FY 2023, EPA will work to transform the Agency's libraries to meet the needs of the 21st Century. This involves operating in an increasingly online and mobile environment; providing services and resources at the customer's point of need; prioritizing the thorough assessment of print materials to support strategic space usage; utilizing detailed data to ensure print collections are highly relevant to the Agency's needs and centralizing core services; and relying on technology and a team of professional librarians to disseminate information and connect people to resources they need to support the demands of both internal and external requests.

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⁹⁹ For more information, please see: https://www.epa.gov/quality/guidelines-ensuring-and-maximizing-quality-objectivity-utility-and-integrity-information.
¹⁰⁰ For more information, please see: https://www.epa.gov/office-inspector-general/report-epa-needs-address-internal-control-

¹⁰⁰ For more information, please see: https://www.epa.gov/office-inspector-general/report-epa-needs-address-internal-control-deficiencies-agencywide-quality.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$123.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. This change also includes program increases for critical IT infrastructure and data management programs.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Federal Information Technology Acquisition Reform Act; Federal Information Security Modernization Act (FISMA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA); Rehabilitation Act of 1973 § 508.

Operations and Administration

Facilities Infrastructure and Operations

Program Area: Operations and Administration Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$257,524	\$285,441	\$288,293	\$2,852
Science & Technology	\$65,093	\$67,500	\$68,912	\$1,412
Building and Facilities	\$36,071	\$27,076	\$73,894	\$46,818
Leaking Underground Storage Tanks	\$932	\$836	\$724	-\$112
Inland Oil Spill Programs	\$628	\$682	\$641	-\$41
Hazardous Substance Superfund	\$81,976	\$68,727	\$71,219	\$2,492
Total Budget Authority	\$442,223	\$450,262	\$503,683	\$53,421
Total Workyears	334.2	315.4	325.4	10.0

Total workyears in FY 2023 include 5.4 FTE to support Facilities Infrastructure and Operations working capital fund (WCF) services.

Program Project Description:

Science and Technology (S&T) resources in the Facilities Infrastructure and Operations Program fund the Agency's rent, utilities, and security. The Program also supports centralized administrative activities and support services, including health and safety, environmental compliance and management, facilities maintenance and operations, space planning, sustainable facilities and energy conservation planning and support, property management, mail, and transportation services. Funding for such services is allocated among the major appropriations for the Agency.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Agency requests an investment of approximately \$1.4 million to support agencywide climate sustainability and resiliency initiatives and EPA facilities projects. EPA will continue to invest in the reconfiguration of EPA's workspaces, enabling the Agency to release office space and avoid long-term rent costs, consistent with HR 4465, 101 the Federal Assets Sale and Transfer Act of 2016. EPA is implementing a long-term space consolidation plan that aims to reduce the number of occupied facilities, consolidate and optimize space within remaining facilities, and reduce square footage wherever practical. EPA also will continue working to enhance its federal infrastructure and operations in a manner that increases efficiency. For FY

 $^{^{101}}$ For additional information, please refer to: $\underline{\text{https://www.congress.gov/bill/114th-congress/house-bill/4465}}, \textit{Federal Assets Sale and Transfer Act of 2016}.$

2023, the Agency is requesting \$29.45 million for rent, \$17.23 million for utilities, and \$11.58 million for security in the S&T appropriation. EPA uses a standard methodology to ensure that rent charging appropriately reflects planned and enacted resources at the appropriation level.

EPA also will work to secure physical and operational resiliency for agency facilities. As part of this work, EPA will continue conducting climate resiliency assessments at all EPA-owned facilities to identify critical upgrades that are necessary to improve facility resiliency against the impacts of climate change, such as roofing stability or seawall construction projects. In FY 2023, EPA will conduct climate assessments at the following facilities: Cincinnati Test and Evaluation Facility, Duluth Environmental Center, Ada Gaar Corner, Ada Environmental Research Center, Region 10 Laboratory – Manchester. EPA will initiate all high-priority projects within 24 months of the completion of a climate assessment.

Further, EPA will continue reconfiguring EPA's workplaces with the goal of reducing long-term rent costs while increasing EPA facility sustainability to combat the effects of climate change and ensuring a space footprint that accommodates a growing workforce. Space reconfiguration enables EPA to reduce its footprint to create a more efficient, collaborative, and technologically sophisticated workplace. However, even if modifications are kept to a minimum, each move requires initial funding to achieve long-term cost avoidance and sustainability goals. These investments support sustainable federal infrastructure, a clean energy future, and goals to achieve net-zero emissions by 2050.

In FY 2023, EPA will pursue aggressive energy, water, and building infrastructure requirements with emphasis on environmental programs (e.g., Environmental Management Systems, Environmental Compliance Programs, Leadership in Energy and Environmental Design Certification, alternative fuel use, fleet reductions, telematics, sustainability assessments). This investment in infrastructure (e.g., architectural and design) and mechanical systems (e.g., electrical, water/steam, HVAC) is necessary to meet the Administration's climate sustainability goals. Additionally, in 2023, EPA will continue to transition to electric vehicles through direct purchase (mobile lab vehicles) or lease through General Services Administration (GSA) for all future fleet procurements where economically feasible. EPA also will identify opportunities to build out necessary charging infrastructure at EPA facility locations. EPA's goal is to use 100 percent carbon pollution-free electricity on a net annual basis by 2030.

EPA also will meet regulatory Occupational Safety and Health Administration (OSHA) obligations and provide health and safety training to field staff (e.g., inspections, monitoring, on-scene Coordinators), and track capital equipment of \$25 thousand or more. The Agency will continue its partnership with GSA to utilize shared services solutions, *USAccess*, and Enterprise Physical Access Control System (ePACS) programs. *USAccess* provides standardized HSPD-12 approved Personal Identity Verification (PIV) card enrollment and issuance and ePACS provides centralized access control of EPA space, including restricted and secure areas.

Performance Measure Targets:

Work under this program supports performance results in the Facilities Infrastructure and Operations Program under the EPM appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$1,412.0) This net program change is an increase to support EPA facilities projects that will ensure EPA has optimal footprint to support the proposed FTE increase in the FY 2023 Budget request, continue ongoing EPA laboratory consolidation projects, and support agencywide climate sustainability and resiliency initiatives. This increase is partially offset by a decrease in rent, utilities, security, and transit subsidy needs.

Statutory Authority:

Federal Property and Administration Services Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Pesticides Licensing

Pesticides: Protect Human Health from Pesticide Risk

Program Area: Pesticides Licensing
Goal: Ensure Safety of Chemicals for People and the Environment
Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$58,124	\$60,181	\$62,726	\$2,545
Science & Technology	\$2,431	\$2,803	\$2,917	\$114
Total Budget Authority	\$60,555	\$62,984	\$65,643	\$2,659
Total Workyears	434.3	385.6	385.6	0.0

Total program work years in FY 2023 include 82.1 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

Program Project Description:

EPA's Pesticide Program screens new pesticides before they reach the market and ensures that pesticides already in commerce are safe. As directed by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), the Federal Food, Drug, and Cosmetic Act (FFDCA), as amended by the Food Quality Protection Act of 1996 (FQPA), and the Pesticide Registration Improvement Extension Act of 2018 (PRIA 4), ¹⁰² EPA is responsible for registering and re-evaluating pesticides to protect consumers, pesticide users, workers who may be exposed to pesticides, children, and other sensitive populations. To make regulatory decisions and establish tolerances (e.g., maximum allowable pesticide residues on food and feed) for food use pesticides and for residential or nonoccupational use, EPA must find the pesticide safe. This involves considering cumulative and aggregate risks and ensuring extra protection for children as required by the FQPA. Aggregate assessments ensure that there is reasonable certainty that no harm will result from aggregate exposure to the pesticide chemical residue, including all anticipated dietary exposure and all other exposure for which there is reliable information. For cumulative assessments, the Agency is required to consider available information concerning the cumulative effects of such residues and other substances that have a common mechanism of toxicity. The Agency must balance the risks and benefits of other uses. For antimicrobial pesticides with public health claims, EPA requires that manufacturers perform tests to ensure the efficacy (i.e., performance) of products per the labelling. In response to the ongoing COVID-19 pandemic and in anticipation of future public health emergencies, the Pesticide Program evaluates public health claims for antimicrobial products, including the accelerated availability of disinfectants determined to be effective against SARS-CoV-2 and development of study designs to support the generation of innovative products, including those that can reduce airborne transmission of the virus.

¹⁰² On Friday, March 8, 2019, the Pesticide Registration Improvement Extension Act of 2018 (PRIA 4), which reauthorizes PRIA for 5 years through fiscal year 2023 and updates the fee collection provisions of the FIFRA, was signed into law.

Under the Science and Technology appropriation, this program operates two laboratories, the Microbiology Laboratory¹⁰³ and the Analytical Chemistry Laboratory,¹⁰⁴ that support the goal of protecting human health and the environment through diverse analytical testing, and analytical method development and validation efforts. These laboratories provide a variety of technical services to EPA, other federal and state agencies, tribal nations, and other organizations to protect human health from pesticide risk.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the FY 2022 – 2026 EPA Strategic Plan.

The Microbiology Laboratory will continue to protect human health by ensuring the availability of scientifically sound efficacy test methods for antimicrobial pesticides (e.g., hospital disinfectants used to treat surfaces). By developing new methods for new uses and emerging pathogens, the regulated community can register new products as well as new claims for existing products. These efforts will have an impact on the public because of the critical support the Laboratory provides to inform regulatory actions for public health pesticides, identify pathways for approval of pathogen-specific claims, and allow for marketplace penetration of these products.

Specifically, in FY 2023, the Microbiology Laboratory will:

- Complete the data collection, analysis, and development of regulatory guidance materials on a quantitative method that follows the Organization for Economic Cooperation and Development (OECD) quantitative method for bactericidal claims to support adoption of the method for regulatory purposes.
- Complete analysis of FY 2021-2022 multi-laboratory data and develop guidance materials and final method (through American Society for Testing and Materials [ASTM] review) for *Legionella* in recirculating water for cooling tower remediation.
- Issue prototype method and guidance for evaluating porous materials found in clinical and agricultural environments (e.g., room separation curtains, vinyl surfaces, wood, etc.)
- Provide efficacy testing and technical support for workplans for the Antimicrobial Product Evaluation Program (APEP) pursuant to EPA's response to the Office of the Inspector General (Report No. 16-P-0316). 105
- Develop residual self-sanitizing disinfectant protocol (SARS-CoV-2) and collect multilaboratory data to support regulatory use.
- Complete data analysis and development of final ASTM method (ASTM work item WK73519) and regulatory guidance document for evaluating the efficacy of antimicrobial towelettes.
- Continue to develop laboratory capacity for conducting efficacy testing with Biosafety Level 3 (BSL-3) microorganisms at the Environmental Science Center in Ft. Meade, Maryland. SARS-CoV-2 is a BSL-3 microorganism; EPA's Office of Pesticide Programs

¹⁰⁴ For additional information, please visit: https://www.epa.gov/aboutepa/about-analytical-chemistry-laboratory-acl.

¹⁰³ For additional information, please visit: https://www.epa.gov/aboutepa/about-microbiology-laboratory.

¹⁰⁵ <u>See</u>, Report No. 16-P-0316, "Report: EPA Needs a Risk-Based Strategy to Assure Continued Effectiveness of Hospital-Level Disinfectants," found at: https://www.epa.gov/office-inspector-general/report-epa-needs-risk-based-strategy-assure-continued-effectiveness.

has the only EPA laboratory with physical containment laboratories to manage BSL-3 microbes.

In FY 2023, the Analytical Chemistry Laboratory will continue to protect human health by ensuring the availability of appropriate analytical methods for analyzing pesticide residues in food and feed and ensuring their suitability for monitoring pesticide residues and enforcing tolerances. In addition, the Laboratory will:

- Develop improved analytical methods using state of the art instruments to replace outdated methods, thus increasing laboratory efficiency and accuracy of the data.
- Provide analytical support to fill in data gaps for the Pesticide Programs' risk assessments and for Section 18 emergency exemptions, and to perform studies for use in risk mitigation.
- Provide analytical assistance and technical advice to all regional offices in support of their enforcement cases, including cases against imported disinfectant products with false claims against SARS-CoV-2. This could disproportionately impact members of communities with environmental justice (EJ) concerns who might not speak English, who may be being targeted by illegal foreign imports, and who may not know to look for approved products (i.e., List N products).
- Verify that pesticides are properly formulated (as requested).
- Operate EPA's National Pesticide Standard Repository. 106

Preventing Disease through Public Health Pesticides: Antimicrobial Testing

EPA's Antimicrobial Testing Program (ATP) has been testing hospital sterilants, disinfectants, and tuberculocides since 1991 to help ensure that products in the marketplace meet stringent efficacy standards. EPA is in the process of developing a new risk-based testing strategy in response to OIG recommendations made in FY 2016. 107 Consistent with the OIG recommendations, EPA suspended the ATP in November 2017. EPA released a draft risk-based strategy, renamed the Antimicrobial Performance Evaluation Program (APEP), in October 2019 for public comment and will continue to seek public input prior to implementation as early as FY 2023. Implementation of the APEP will benefit public health by ensuring approved antimicrobials meet contemporary efficacy standards.

The Microbiology Laboratory will continue to develop efficacy methods to support EPA's antimicrobial pesticide regulatory programs. The results of these efforts will help ensure products are available to control various bacteria (e.g., Clostridioides difficile), viruses (e.g., SARS-CoV-2), and biofilms and to inform EPA's method development activities in FY 2023 and beyond.

Performance Measure Targets:

Work under this program supports performance results in the Pesticides: Protect the Environment from Pesticide Risk Program under the EPM appropriation.

repository.

107 For additional information, please visit: https://www.epa.gov/pesticide-registration/antimicrobial-performance-evaluation- program-apep.

¹⁰⁶ For additional information, please visit: https://www.epa.gov/pesticide-analytical-methods/national-pesticide-standard-

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$90.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$90.0) This change to fixed and other costs is a decrease due to the recalculation of laboratory fixed costs.
- (+\$114.0) This program change is an increase in laboratory Operations and Maintenance costs.

Statutory Authority:

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Federal Food, Drug, and Cosmetic Act (FFDCA), §408.

Pesticides: Protect the Environment from Pesticide Risk

Program Area: Pesticides Licensing Goal: Ensure Safety of Chemicals for People and the Environment Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$36,714	\$39,543	\$45,876	\$6,333
Science & Technology	\$1,805	\$2,207	\$2,252	\$45
Total Budget Authority	\$38,519	\$41,750	\$48,128	\$6,378
Total Workyears	322.1	249.6	259.6	10.0

Total program work years in FY 2023 include 53.2 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

Program Project Description:

EPA's Pesticide Program screens new pesticides before they reach the market and ensures that pesticides already in commerce are safe. As directed by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), the Federal Food, Drug, and Cosmetic Act (FFDCA), as amended by the Food Quality Protection Act of 1996 (FQPA), and the Pesticide Registration Improvement Extension Act of 2018 (PRIA 4), ¹⁰⁸ EPA is responsible for registering and re-evaluating pesticides to protect humans and plants, animals, and ecosystems that are not targets of the pesticide. Under FIFRA, the Agency must balance the risks and benefits of other uses. For antimicrobial pesticides with public health claims, EPA requires that manufacturers perform tests to ensure the efficacy (*i.e.*, performance) of products per the labelling.

In addition to FIFRA responsibilities, the Agency has responsibilities under the Endangered Species Act (ESA). ¹⁰⁹ Under ESA, EPA must ensure that pesticide regulatory decisions will not destroy or adversely modify designated critical habitat or result in jeopardy to the continued existence of species listed by the U.S. Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS). Where risks are identified, EPA must work with FWS and NMFS in a consultation process to ensure these pesticide registrations also will meet the ESA standard.

Under the Science and Technology appropriation, EPA's Pesticide Program operates two laboratories, the Microbiology Laboratory¹¹⁰ and the Analytical Chemistry Laboratory,¹¹¹ that support the goal of protecting human health and the environment through diverse analytical testing, and analytical method development and validation efforts. These laboratories provide a variety of technical services to EPA, other federal and state agencies, tribal nations, and other organizations

¹⁰⁸ On Friday, March 8, 2019, the Pesticide Registration Improvement Extension Act of 2018 (PRIA 4), which reauthorizes PRIA for 5 years through fiscal year 2023 and updates the fee collection provisions of the FIFRA was signed into law.

¹⁰⁹ <u>See</u>, ESA sections 7(a)(1) and 7(a)(2); Federal Agency Actions and Consultations (16 U.S.C. § 1536(a)), available at the U.S. Fish and Wildlife Service ESA internet site: https://www.fws.gov/service/section-7-consultations.

¹¹⁰ For additional information, please visit: https://www.epa.gov/aboutepa/about-microbiology-laboratory.

¹¹¹ For additional information, please visit: https://www.epa.gov/aboutepa/about-analytical-chemistry-laboratory-acl.

to ensure the protection of the environment from pesticide risk. Laboratory activities in FY 2023 will include; continuing to lead collaborative studies with other laboratories to validate testing methods for antimicrobial products to determine their efficacy against pathogens such as *Legionella*; working with the Antimicrobials Division on the implementation of an appropriate performance standard for a revised method for measuring the efficacy of disinfectants quantitatively; working with state laboratories to share method development and analyze samples, as requested; and working with investigations to evaluate the composition of potentially illegal pesticides.

EPA's Pesticide Program laboratories provide a diverse range of environmental data that the Agency uses to make informed regulatory decisions. The Analytical Chemistry Laboratory and the Microbiology Laboratory each provide critical laboratory testing and support activities to assist the decision-making processes of the Agency. The laboratories develop standard methods to evaluate the performance of antimicrobial products such as disinfectants used in hospital settings, and validate analytical chemistry methods to ensure that EPA, the Food and Drug Administration (FDA), the United States Department of Agriculture (USDA), and the states have reliable methods to measure and monitor pesticide residues in food and the environment.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the FY 2022 – 2026 EPA Strategic Plan.

In FY 2023, the Microbiology Laboratory will continue to work with the U.S. Department of Homeland Security and USDA to evaluate various environmentally relevant materials such as porous materials (e.g., wood, concrete, fabric, tile, etc.) which simulate use sites in livestock, poultry, and other food animal rearing operations. Outbreaks of avian influenza, African swine fever, Newcastle Disease virus, and other pathogens can devastate American agriculture, and the persistence of these viruses on surfaces is not well understood. Currently, due to the unavailability of standardized quantitative test methods to simulate real-world conditions, the response to an animal pathogen outbreak and submission of requests under FIFRA Section 18 to address these outbreaks rely on published, and often antiquated, data. Thus, the use of commonly available chemicals for remediation (e.g., citric acid, sodium hypochlorite, chlorine dioxide, etc.) of contaminated sites without extensive knowledge of their environmental impact from such widespread use is deemed problematic. The goal of the Laboratory is to develop a quantitative approach for assessing the effectiveness of antimicrobial products against high consequence animal viruses and other pathogens to provide a tool for the development of high-quality efficacy data on relevant surface materials. The availability of the method to the regulated community will support more effective, targeted chemistries and refined antimicrobial application techniques for porous materials and support the development of new antimicrobial products following contemporary regulatory requirements.

In FY 2023, the Analytical Chemistry Laboratory will continue to focus on analytical method development and validations as well as special studies to address specific, short-term, rapid-turnaround priority issues. The Laboratory also will continue to provide technical and analytical assistance to EPA's Enforcement and Compliance Assurance Program and regional offices in

support of their enforcement/complaint cases, including analysis of dicamba and its metabolites in soil and vegetation samples and analysis of products sold in online commerce. The Analytical Chemistry Laboratory also will continue to provide national technical analytical support for the development of data needed for the Pesticides Program's risk assessments and for Section 18 emergency exemptions, and to perform studies for use in risk mitigation.

Performance Measure Targets:

Work under this program supports performance results in the Pesticides: Protect the Environment from Pesticide Risk Program under the EPM appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$57.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$32.0) This change to fixed and other costs is a decrease due to the recalculation of laboratory fixed costs.
- (+\$20.0) This program change is a slight increase in laboratory Operations and Maintenance costs.

Statutory Authority:

Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); Endangered Species Act (ESA).

Pesticides: Realize the Value of Pesticide Availability

Program Area: Pesticides Licensing Goal: Ensure Safety of Chemicals for People and the Environment Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$6,034	\$7,730	\$7,979	\$249
Science & Technology	\$645	\$876	\$984	\$108
Total Budget Authority	\$6,680	\$8,606	\$8,963	\$357
Total Workyears	35.3	35.8	35.8	0.0

Program Project Description:

EPA's Pesticide Program laboratories provide significant contributions to help the Agency realize the value of pesticides. They consist of the Microbiology Laboratory¹¹² and the Analytical Chemistry Laboratory,¹¹³ that support the goal of protecting human health and the environment through diverse analytical testing and analytical method development, and validation efforts. These laboratories provide a variety of technical services to EPA, other federal and state agencies, tribal nations, and other organizations to ensure the value of pesticide availability is realized.

The primary focus of the Microbiology Laboratory is standardization of existing test methods and the development and validation of methods for new uses and emerging pathogens for antimicrobial products with public health claims – products used to kill or suppress the growth of pathogenic microorganisms on inanimate objects and surfaces. The Laboratory is instrumental in advancing the science of antimicrobial product testing and provides technical expertise to standard-setting organizations and various agency stakeholder groups.

The Analytical Chemistry Laboratory provides scientific, laboratory, and technical support through chemical analyses of pesticides and related chemicals to protect human health and the environment. The Analytical Chemistry Laboratory responsibilities include providing technical support and chemical analyses of pesticides and related chemicals; developing new multi-residue analytical methods; and operating EPA's *National Pesticide Standard Repository*, ¹¹⁴ which collects and maintains pesticide standards (*i.e.*, samples of pure active ingredients or technical grade active ingredients, regulated metabolites, degradates, and related compounds).

¹¹² For additional information, please visit: https://www.epa.gov/aboutepa/about-microbiology-laboratory.

¹¹³ For additional information, please visit: https://www.epa.gov/aboutepa/about-analytical-chemistry-laboratory-acl.

¹¹⁴ For additional information, please visit: https://www.epa.gov/pesticide-analytical-methods/national-pesticide-standard-repository.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the FY 2022 – 2026 EPA Strategic Plan.

In FY 2023, EPA will realize the benefits of pesticides by ensuring the continued operation of the National Pesticide Standard Repository. The Microbiology Laboratory and the Analytical Chemistry Laboratory will continue to conduct chemistry and efficacy evaluations for antimicrobials. As the recognized source for expertise in pesticide analytical method development, EPA's Pesticide Program laboratories will continue to provide quality assurance review, technical support, and training to EPA's regional offices, state laboratories, and other federal agencies that implement the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

The Analytical Chemistry Laboratory will continue to maintain the National Pesticide Standard Repository and collect and maintain an inventory of analytical standards of registered pesticides in the U.S. EPA provides these pesticide standards (approximately 4,000 to 5,000 annually) to qualified federal, state, territorial, and tribal laboratories for food and product testing and environmental monitoring. In FY 2018, efficiency reviews showed that the typical turnaround time for a standard request was approximately 15 working days. Using the results of the efficiency review, the Analytical Chemistry Laboratory is implementing procedural changes, such as requiring requests be grouped for pesticide standards, instituting an inventory control system focusing on high demand standards, and installing a chemist as the lead staff person in the Repository to reduce the turnaround time to 12 days. 115 These initial changes will help federal agencies, states, and tribal laboratories expedite enforcement efforts, and further process enhancements will continue in FY 2023 and beyond. The Analytical Chemistry Laboratory also will continue its work in:developing and validating multiresidue methods using state-of-the-art methodology and instrumentation; providing chemical analysis for assessing risk to human health and to the environment from agricultural use of pesticides; and providing technical support to EPA regional offices to ensure that pesticide products are formulated according to approved labels.

In FY 2023, the Microbiology Laboratory will continue to evaluate FIFRA Section 18 emergency exemptions and novel protocol requests for new uses and novel pathogens. The Laboratory also will continue the development of data and methods to support Section 18 for high consequence animal pathogens (e.g., African swine fever, Newcastle disease virus, etc.). In addition, the continued work to develop new methods for emerging pathogens (e.g., Legionella, Candida auris, etc.) and clinical porous materials provides a pathway for registrants to add new claims to existing antimicrobial pesticides. In some cases, the methods will lead to the development of new products when currently registered formulations are not effective against emerging pathogens. The Laboratory anticipates supporting up to 25 requests for these activities during FY 2023. The Microbiology Laboratory also will continue to refine and develop methods to support EPA's Section 3 and Section 18 regulatory programs, continuing to develop testing methods for evaluating effectiveness of disinfectant products against airborne SARS-CoV-2 virus. In addition, the Laboratory will collaborate with EPA's Homeland Security Research Program to develop guidance for registrants seeking to make long-term disinfectant efficacy claims and explore novel control and application options for disinfectant products. The Laboratory also will continue to

¹¹⁵ For those pesticide standard requests that are not complicated and/or standards that are not expiring.

develop a quantitative efficacy test method which may provide a pathway for evaluating disinfectant claims for porous material (vinyl, room divider curtains, etc.)

Performance Measure Targets:

Work under this program supports performance results in the Pesticides: Protect the Environment from Pesticide Risk Program under the EPM appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$45.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$73.0) This change to fixed and other costs is a decrease due to the recalculation of rent, utilities, and security.
- (+\$136.0) This program change is an increase in laboratory Operations and Maintenance costs.

Statutory Authority:

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Federal Food, Drug, and Cosmetic Act (FFDCA) § 408.

Research: Air, Climate and Energy

Research: Air, Climate and Energy

Program Area: Research: Air, Climate and Energy Cross-Agency Mission and Science Support

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	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Science & Technology	\$76,733	\$95,250	\$132,924	\$37,674
Total Budget Authority	\$76,733	\$95,250	\$132,924	\$37,674
Total Workyears	265.6	258.0	297.7	39.7

Program Project Description:

Air pollution adversely affects human health and the environment, yet millions of Americans still live in or near geographic areas that do not meet national standards for air pollutants. Climate change is impacting public health, air, and water quality today and will exacerbate other environmental challenges in the future. Many air pollution sources are located communities with environmental justice concerns that also are more vulnerable to the impacts of climate change. To address these and other air pollution issues, EPA's Air, Climate, and Energy (ACE) Research Program provides scientific information to EPA program and regional offices, tribes, states, and other partners. ACE advances the science needed to achieve clean air, attain the National Ambient Air Quality Standards (NAAQS),¹¹⁶ reduce emissions of hazardous air pollutants (HAPs), address the causes and consequences of climate change and environmental inequities, and develop more resilient communities to protect human health and ecosystems. ACE also contributes to understanding the impacts of interventions that reduce exposures and protect public health; strategies to prepare, adapt, and build resilience; and responses to the transformation of our energy systems.

The ACE Research Program is centered around two inter-related research topic areas: 1) understanding air pollution and climate change and their impacts on human health and ecosystems; and 2) responding to risks and impacts and preparing for the future. The ACE Research Program relies on successful partnerships, including with academic and industry researchers, tribes, states, local and private sector organizations, as well as key federal agencies.

Recent Accomplishments of the ACE Research Program include: 117

• Informing Ozone Attainment Strategies: In FY 2021, EPA researchers produced scientific data from measurements and modeling of ozone formation and transport in two

¹¹⁶ Section 109 of the Clean Air Act identifies two types of national ambient air quality standards – primary standards provide public health protection, including protecting the health of "sensitive" populations such as children, older adults, and persons with pre-existing disease such as asthma or cardiovascular disease and secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, wildlife, soils, water, crops, vegetation, and buildings. Unless otherwise stated, in this document the term NAAQS will refer to both primary and secondary standards.

¹¹⁷ For more information, please see https://www.epa.gov/research/national-research-programs.

difficult non-attainment areas, Connecticut and Denver. ¹¹⁸ The research demonstrated how the combination of local emissions controls and a better understanding of ozone transport from outside a non-attainment area are needed to effectively reduce ozone concentrations within a non-attainment area. EPA researchers also used a detailed hemispheric air quality model to improve estimates of the contributions of long-range transport of ozone from outside North America to ozone concentrations in the U.S., demonstrating an increase in this contribution over the period from 1990-2010.

- Climate Change Impacts and Adaptation Planning Tools: Climate change continues to impact U.S. communities through extreme heat and precipitation, flooding, and drought. With heat waves and droughts increasing the size and severity of wildfires, EPA researchers improved emissions factors for different types of fire conditions, including those occurring during prescribed fires. EPA researchers collaborated with scientists from the U.S. Forest Service and the Department of Interior to publish the Comparative Assessment of the Impacts of Prescribed Fire Versus Wildfire, which used integrated modeling of smoke emissions, air quality, and health impacts to demonstrate that in two case studies, well-designed prescribed fires can potentially reduce the overall size of a subsequent wildfire and reduce smoke emissions and public health impacts. In FY 2021, EPA researchers also published a methodology for quantifying potential changes in future extreme precipitation from climate projections and applied it to estimate significant increases in the highest rainfall frequencies, up to 168 percent for 1,000-year rainfall events, and widespread regional increases in total rainfall up to 44 percent from a single tropical storm. In the content of the projection of the
- **PFAS:** States and communities continue to be concerned with the production and disposal of materials containing perfluoroalkyl and polyfluoroalkyl substances (PFAS) and the associated air emissions of PFAS. EPA is committed to conducting research to better understand PFAS exposure pathways and understand the effects of PFAS treatment and destruction technologies, including air emissions from incomplete combustion of PFAS during incineration as a means of destroying PFAS waste. ¹²² In FY 2021, EPA researchers published a review of air sources and pathways for PFAS exposures ¹²³ and produced a draft method (Other Test Method 45) that is suitable for 50 targeted PFAS compounds. ¹²⁴ This method provided guidance to states and communities for establishing in-stack emissions method detection limits and quantitative reporting limits and can be expanded to new target PFAS compounds as new standards become available.

¹¹⁸ For more information, please see:

https://www.cmascenter.org/conference/2020/slides/Matichuketal_19thAnnual_CMAS_Presentation_Oct28th_2pmSession.pdf

¹¹⁹ For more information, please see: https://www.sciencedirect.com/science/article/pii/S135223102100011X?via%3Dihub

¹²⁰ For more information, please see: https://ofmpub.epa.gov/eims/eimscomm.getfile?p_download_id=543347

¹²¹ For more information, please see: https://www.nature.com/articles/s41612-021-00176-9

¹²² For more information, please see: https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap final-508.pdf

¹²³ For more information, please see: https://intranet.ord.epa.gov/sites/default/files/2021-08/JEH1-2.21-Special-Report-Review-Source-Transportation-Pathways.pdf

¹²⁴ For more information, please see: https://www.epa.gov/sites/default/files/2021-01/documents/otm 45 semivolatile pfas 1-13-21.pdf

FY 2023 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022-2026 EPA Strategic Plan.

The ACE Research Program prioritizes key activities to support attainment of the NAAQS and implementation of stationary and mobile source regulations, as well as foundational science to inform decision making with consideration of increasing climate change impacts. The ACE Research Program includes work to develop, evaluate, and apply measurement methods and models incorporating the latest physical science and understanding of behaviors that impact the system. The research performed addresses program and regional science information needs across multiple disciplines. The research conducted also advances EPA's capabilities to understand sources of air pollution, the fate and transport of air contaminants, and their effects in the midst of changing energy infrastructure and climate. The planned research responds to identified needs in areas of emerging concern to the Administration, EPA, tribes, and state policymakers, including climate change, environmental justice and equity, PFAS, ethylene oxide, and wildland fires.

In FY 2023, the ACE Research Program will continue to:

- Assess human and ecosystem exposures and effects associated with air pollutants on individual, community, regional, national, and global scales, both today and in the future, under a changing climate.¹²⁵
- Assess the consequences of climate change and the vulnerability of communities and ecosystems to climate change impacts, including wildfires and other extreme events, and identify and evaluate strategies to adapt to and build resilience to these impacts.
- Characterize disproportionate impacts of climate change and air pollution on communities with environmental justice concerns and identify and evaluate strategies to reduce impacts in those communities.
- Develop and evaluate innovative multi-pollutant and sector-based approaches to preventing pollution, particularly in environmental justice communities.
- Characterize the positive and negative environmental effects of energy efficiency and renewable energy and evaluate strategies to expand the benefits of transformations in transportation and energy systems, especially for communities with environmental justice concerns.
- Provide human exposure and environmental modeling, monitoring, metrics, and information needed to inform air quality and climate change decision making at the federal, tribal, state, and local level.

¹²⁵ Beyond effects associated with ambient air exposures, consideration of potential human and ecosystem exposures and effects associated with deposition of air pollutants to water and land also are evaluated.

- Deliver state-of-the-art tools that tribes and states can use to identify effective emission reduction strategies to meet the NAAQS and enhance air quality measurement and modeling methods to ascertain current and future compliance with the NAAQS, including potential impacts from the changing climate.
- Develop and apply approaches to evaluate the positive and negative environmental impacts
 of the transition to a low-carbon energy system, including development of a report to
 Congress on the environmental and resource conservation impacts of the Renewable Fuel
 Standard. 126

In FY 2023, EPA will invest additional funds to expand the Administration's science-based approach to improving wildfire readiness by enhancing wildfire data and communications related to air quality and helping communities become "smoke ready". Smoke ready communities benefit community health by coordinating community-level action related to monitoring outdoor air quality, creating clean indoor air, and communicating actionable public health messaging. Smoke ready communities have evidence-based strategies in place to guide responses to wildfire smoke events, which include actions that people can take to reduce exposures to harmful smoke, preventing health impacts such as asthma attacks, emergency room visits, heart attacks, and premature death.

EPA also will invest additional funds to increase PFAS research efforts with specific emphasis on implementing the *PFAS Strategic Roadmap*. ¹²⁷

Research Planning:

EPA research is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that is developed with and reflects the research needs of Agency programs and regional offices, states, and tribes. Each research program is in the process of developing the fourth generation of the StRAPs, which will continue the practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its partners.

The Office of Research and Development (ORD) works with various groups, including communities, to ensure the integrity and value of its research through a variety of mechanisms that include:

- EPA's Board of Scientific Counselors (BOSC)
 - ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.

¹²⁶ Required by the Energy Independence and Security Act of 2007, PL110-140. For more information, please see: https://www.epa.gov/laws-regulations/summary-energy-independence-and-security-act. More information about the report is available at: https://cfpub.epa.gov/si/si https://cfpub.epa.gov/si/si https://cfpub.epa.gov/si/si https://cfpub.epa.gov/si/si https://c

¹²⁷ See EPA's PFAS Strategic Roadmap at: https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap_final-508.pdf

- State Engagement
 - EPA's state engagement 128 is designed to inform states about their role within EPA and EPA's research programs and to better understand the science needs of state environmental and health agencies.
- Tribal Partnerships
 - O Key tribal partnerships are established through the Tribal Science Program, which provides a forum for the interaction between tribal and Agency representatives. These interactions identify research of mutual benefit and lead to collaborations on important tribal environmental science issues.

Performance Measure Targets:

(PM RD2) Number of ORD activities related to environmental justice that involve or are designed to be applicable to tribes, states, territories, local	FY 2022 Target	FY 2023 Target
governments, and communities.	No Target Established	TBD
(PM RD3) Percentage of ORD climate-related research products meeting	FY 2022	FY 2023
partner needs.	Target	Target
	93	94
(PM RD4) Percentage of ORD environmental justice-related research	FY 2022	FY 2023
products meeting partner needs.	Target	Target
	93	94

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$2,346.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$37.0) This change to fixed and other costs is an increase due to the recalculation of laboratory fixed costs.
- (-\$30,030.0) This program change is a decrease due to the reduction in resources towards the Air, Climate, and Energy Research Program's collaborative research on climate adaptation and resilience with the new Advanced Research Projects Agency for Climate (ARPA-C) that will be located within DOE. The ARPA model of high-risk, accelerated research is uniquely meant to conduct R&D that, if successful, results in transformational technology advancements.
- (+\$60,446.0 / +30.0 FTE) This net program change increases resources and FTE for the Air, Climate, and Energy Research Program. This increase is targeted to EPA's commitment to enhance its efforts to combat climate change. This increase will more than double its research to assess the impacts of climate change on human health and ecosystems. This investment includes \$5.411 million in payroll.

¹²⁸ For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

- (+\$4,625.0 / +9.7 FTE) This program change increases resources and FTE for wildfires research. This increase is targeted to improve wildfire readiness by enhancing wildfire data and communications related to air quality and helping communities become "smoke ready." This investment also includes \$1.75 million in payroll.
- (+\$250.0) This program change increases funding for EPA's PFAS research efforts, with specific emphasis on implementing the *PFAS Strategic Roadmap*.

Statutory Authority:

Clean Air Act; Title II of Energy Independence and Security Act of 2007; Environmental Research, Development, and Demonstration Authorization Act (ERDDAA); National Environmental Policy Act (NEPA) § 102; Pollution Prevention Act (PPA); Global Change Research Act of 1990.

Research: Chemical Safety and Sustainability

Research: Chemical Safety for Sustainability

Program Area: Research: Chemical Safety for Sustainability Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$115	\$0	\$0	\$0
Science & Technology	\$75,966	\$89,518	\$98,093	\$8,575
Hazardous Substance Superfund	\$6,065	\$0	\$8,060	\$8,060
Total Budget Authority	\$82,146	\$89,518	\$106,153	\$16,635
Total Workyears	278.1	273.9	300.9	27.0

Program Project Description:

EPA's Chemical Safety for Sustainability (CSS) Research Program provides scientific and technical approaches, information, tools, and methods to support the Agency and others to make better-informed, more-timely decisions about chemicals and their potential risks to human health and the environment. ¹²⁹ CSS products strengthen the Agency's ability to use the best available science to evaluate and predict human health and ecological impacts from the use, reuse, recycling, and disposal of manufactured and naturally occurring chemicals and their by-products.

CSS research informs Agency decisions about chemicals, accelerates the pace of chemical assessment and decision-making, and helps to replace, reduce, and refine the use of mammals to evaluate chemical risks to ecological systems and human health. CSS products inform Agency programs established to implement environmental regulations that govern agency actions to evaluate existing and new chemicals (Toxic Substances Control Act [TSCA]); develop and use alternative testing protocols (TSCA, Federal Insecticide Fungicide and Rodenticide Act [FIFRA]); protect the Nation's food supply (Food Quality Protection Act [FQPA]), address product safety (Federal Food Drug Cosmetics Act [FFDCA]), support chemical prioritization (TSCA, Safe Drinking Water Act [SDWA]), support the development of safer and more sustainable chemicals and alternatives (Pollution Prevention [P2] Act [PPA]), evaluate pesticide registrations (FIFRA, Endangered Species Act), and mitigate active (Resource Conservation and Recovery Act [RCRA]) and inactive (Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA]) Superfund remediation sites.

CSS research activities are coordinated with the activities of other national research programs and the results produced inform other high priority research topics. For example, planned research will address per- and polyfluoroalkyl substances (PFAS), climate change, and risks in communities with environmental justice (EJ) concerns. Coordination with the Health and Environmental Risk Assessment (HERA) Research Program ensures that the approaches, tools, and information

¹²⁹ For the current CSS StRAP, please see: https://www.epa.gov/research/chemical-safety-sustainability-strategic-research-action-plan-2019-2022.

produced by CSS can be used to improve chemical risk assessments, reduce uncertainties associated with those assessments, and increase the speed of delivering chemical information to the Agency.

The CSS Research Program is organized into eight, integrated research areas that include research on toxicity, exposure, human health, ecological health, chemical modeling and prediction, and chemical integration and informatics. These research areas fulfill requirements for chemical evaluation under TSCA as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act and as part of SDWA; pesticide evaluation under FIFRA; chemical testing for endocrine system impacts under FQPA; Agency implementation of TSCA Section 5 (New Chemicals) and Section 6 (Existing Chemicals); the development of safer and more sustainable chemicals and alternatives under PPA and TSCA, and identification of contaminants of emerging concern. The CSS Research Program provides ongoing support to the Agency's Chemical Safety and Pollution Prevention Program for the successful implementation of these TSCA activities, as well as their evaluation of pesticides under FIFRA. 130

Recent Accomplishments of the CSS Research Program include:

- Development and Advancement of New Approach Methods (NAMs): CSS objectives and research activities are strongly supporting the development of NAMs that will improve the Agency's understanding of chemical toxicity. NAMs are focused on using faster, less expensive approaches that reduce the use of mammals for toxicity testing. CSS continues to collaborate closely with the Chemical Safety and Pollution Prevention Program to implement the June 2018 TSCA Strategic Plan¹³¹ that emphasizes the development and implementation of alternative test methods. Additionally, CSS research is a key component of the December 2021 NAMs workplan. 132 Critical to this effort is implementation of a tiered hazard evaluation strategy. CSS investigators are currently advancing methods in high-throughput phenotypic profiling (HTPP) and high-throughput transcriptomics (HTTr). These approaches can be applied to prioritize and group chemicals. Additionally, investigators are exploring approaches and models for species extrapolation in the ecotoxicology domain, and development of high-throughput exposure and toxicokinetic models. In May of 2021, in an EPA report, 133 CSS research enabled development of a method, to integrate publicly available hazard, exposure, persistence, and bioaccumulation information for more than 33,000 chemical substances, including both traditional and NAM data. The method allows for discriminating between chemicals that have the potential to present hazard or exposure concerns and those that do not.
- Continued Release, Evolution, and Updating of Multiple Digital Information Products to Inform Decision Making: The CompTox Chemicals Dashboard¹³⁴ is the Agency's 'first-stop-shop' for information on chemical properties, characteristics, structure, toxicity, exposure, and persistence. The Dashboard is used by the Agency and

¹³⁰ For more information, please see: https://www.epa.gov/chemical-research.

¹³¹ For more information, please see: https://www.epa.gov/sites/production/files/2018-06/documents/epa alt strat plan 6-20-18 clean final.pdf.

¹³² For more information, please see: https://www.epa.gov/chemical-research/new-approach-methods-work-plan.

¹³³ For more information, please see: https://cfpub.epa.gov/si/si_public_pra_view.cfm?dirEntryID=349776&Lab=CCTE

¹³⁴ For more information, please see: https://comptox.epa.gov/dashboard.

its external partners to generate real-time quantitative structure-activity relationship (QSAR) predictions for chemical property and toxicity endpoints. It allows for flexible searches including chemical and functional use and has batch search functionality. As of the June 2021 release, the *Dashboard* contains curated data on 900,000 chemicals. The ECOTOX Knowledgebase¹³⁵ serves as the comprehensive, publicly available source of environmental toxicity data on aquatic life, terrestrial plants, and wildlife. The March 2021 release of the ECOTOX Knowledgebase contains over 1 million records and provides information on over 12,000 chemicals and over 13,000 species from over 50,000 references. The Chemical Transformation Simulator continues to develop as a web-based tool for predicting environmental and biological transformation pathways for organic chemicals. Recently, the Simulator was expanded to include environmental transformation information for PFAS chemicals. SeqAPASS¹³⁶ – Sequence Alignment to Predict Across Species Susceptibility – is a tool enabling extrapolation of toxicity information across species. Version 5.0, released in December 2020, features improved functionalities and visualization of results. Research and development for all these systems continues in order to meet the information needs of decision makers.

FY 2023 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022-2026 EPA Strategic Plan.

The objective of CSS research activities is to inform risk-based decisions made by EPA programs, states, tribes, and others. Of particular importance are 'chemicals of immediate and emerging concern,' such as PFAS, which heighten the need for rapid scientific approaches to evaluate potential chemical safety. In FY 2023, CSS will invest additional funds in PFAS research efforts, with specific emphasis on implementing the *PFAS Strategic Roadmap*. ¹³⁷ CSS also will increase its efforts to conduct research and reviews on scientifically sound EPA-initiated existing chemical risk evaluations in support of TSCA.

In FY 2023, research efforts also will focus on replacing, reducing, and refining the use of mammals in testing, while accelerating the pace of chemical assessment and decision-making. CSS research products will continue to use innovative *in vitro* and *in silico* (computer modeling) approaches to provide more timely and comprehensive information about chemical hazard and exposure while still providing information of equal or greater biological predictivity than current *in vivo* animal models.

Selected research areas are highlighted below for work in FY 2023.

• **High-Throughput Toxicity (HTT) Testing:** This research is focused on developing, testing, and applying NAMs to evaluate chemical hazards, with an emphasis on developmental neurotoxicology, inhalation toxicology, thyroid disruption, and

136 For more information, please see: https://www.epa.gov/chemical-research/sequence-alignment-predict-across-species-suscentibility

¹³⁵ For more information, please see: https://cfpub.epa.gov/ecotox/.

¹³⁷ See EPA's PFAS Strategic Roadmap at: https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap final-508.pdf

methodologically challenging chemicals. These will enable EPA to make better, more timely decisions about chemicals by increasing toxicological information for more chemicals.

- Rapid Exposure and Dosimetry (RED) and Ecotoxicological Assessment and Modeling (ETAM): This research parallels work in the HTT research area to provide information to inform Agency chemical risk assessment activities. Chemical exposure research also includes the continued development of advanced analytical and computational tools, such as non-targeted analysis, to detect and identify unknown chemicals in complex environmental media, biological media, and consumer products. Non-targeted analysis has been critical for the identification of previously unknown PFAS chemicals in the environment. Ecotoxicological Assessment and Modeling efforts support the Agency's work considering the impacts to pollinators. Specifically, research includes assessing the impacts of pesticides on honeybees and pollen bees to support pesticide assessments.
- **PFAS Research:** ¹³⁸ PFAS are a class of substances of concern and EPA is committed to helping states, tribes, and local communities understand and manage risks associated with these chemicals. ¹³⁹ For most of the over 6,000 PFAS chemicals, there are little or no published toxicity data available. CSS is addressing this gap by conducting high-throughput toxicological screening assays on hundreds of PFAS chemicals. In FY 2023, CSS will build upon the research foundation formed from completed work outlined in the *PFAS Strategic Roadmap*. ¹⁴⁰ For more information on CSS' PFAS work, please see the CSS narrative for the Superfund appropriation.
- Improved Understanding of Biological Impacts: This research helps decision-makers understand the significance of chemical impacts on biological systems. This is especially important to understanding chemical impacts on developmental and reproductive biology. This program will employ data generated from its chemical evaluation research to develop interpretive frameworks and models to place complex information into biological, chemical, and toxicological context. Data developed in the HTT and Virtual Tissue Modeling research areas will contribute to the study of adverse outcome pathways (AOPs), which link molecular initiating events at the cellular level to apical outcomes expressed at the whole animal level.
- Delivery of Chemical Information: The Chemical Safety Analytics research area will
 continue to provide computational, predictive tools to estimate physicochemical,
 toxicological, and exposure information for data poor chemicals. CSS is working with the
 Agency to build program-specific applications, such as RapidTox that facilitate access and
 use of relevant information to support different decision contexts. These applications will
 give risk assessors and decision-makers confidence that the new approaches, data, and tools

¹³⁸ For more information, please see: https://www.epa.gov/sites/production/files/2019-02/documents/pfas-action-plan 021319-508compliant-1.pdf.

¹³⁹ For more information, please see: https://www.epa.gov/pfas/pfas-community-engagement.

¹⁴⁰ For more information, please see: https://www.epa.gov/pfas/pfas-strategic-roadmap-epas-commitments-action-2021-2024

developed in CSS are both scientifically robust and relevant to environmental decision making.

Research Planning:

EPA research is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is planned with their active involvement. Each research program is in the process of developing the fourth generation of the StRAPs, which will continue the practice of conducting innovative scientific research aimed at comprehensively assessing and solving the problems encountered by the Agency and its stakeholders.

EPA works with various groups, including communities, to ensure the integrity and value of its research and research planning efforts through a variety of mechanisms that include:

- EPA's Board of Scientific Counselors (BOSC)
 - The Office of Research and Development (ORD) meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.
- State Engagement
 - EPA's state engagement¹⁴¹ is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies.
- Tribal Partnerships
 - Key tribal partnerships are established through the Tribal Science Program which
 provides a forum for the interaction between tribal and Agency representatives.
 These interactions identify research of mutual benefit and lead to collaborations on
 important tribal environmental science issues.

Performance Measure Targets:

(PM RD1) Percentage of ORD research products meeting partner needs.

FY 2022
Target
73
94

FY 2022
FY 2023
FY 2023

(PM RD5) Number of actions implemented for EPA scientific integrity objectives.	FY 2022 Target	FY 2023 Target
objectives.	No Target Established	21

¹⁴¹ For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$2,270.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$22.0) This change to fixed and other costs is an increase due to the recalculation of laboratory fixed costs.
- (+\$3,772.0 / +22.0 FTE) This net program change increases funding and FTE for the Chemical Safety for Sustainability Research Program. These FTE will assist in providing scientific and technical approaches, information tools, and methods to better inform decision-making. This investment includes \$3.961 million in payroll and also reflects a slight adjustment in non-payroll resources.
- (+\$500.0) This program change increases funding for EPA's PFAS research efforts, with specific emphasis on implementing the *PFAS Strategic Roadmap*.
- (+\$2,011.0 / +5.0 FTE) This program change increases resources and FTE for EPA's efforts to conduct research and reviews on existing EPA-initiated chemical risk evaluations in support of TSCA. This investment includes \$901.0 thousand in payroll.

Statutory Authority:

Clean Air Act §§ 103, 104; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Children's Health Act; 21st Century Nanotechnology Research and Development Act; Clean Water Act; Federal Food, Drug, and Cosmetic Act (FFDCA); Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); Pollution Prevention Act (PPA); Resource Conservation and Recovery Act (RCRA); Safe Drinking Water Act (SDWA); Toxic Substances Control Act (TSCA).

Health and Environmental Risk Assessment

Program Area: Research: Chemical Safety for Sustainability Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Science & Technology	\$35,251	\$37,482	\$42,355	\$4,873
Hazardous Substance Superfund	\$3,654	\$12,824	\$4,896	-\$7,928
Total Budget Authority	\$38,905	\$50,306	\$47,251	-\$3,055
Total Workyears	163.3	154.9	174.9	20.0

Program Project Description:

EPA's Health and Environmental Risk Assessment (HERA) Program is focused on the science of assessments that inform decisions made by EPA and others, including states and tribes. These assessments provide the scientific basis for decisions under an array of environmental laws, including the: Clean Air Act (CAA), Clean Water Act (CWA), Safe Drinking Water Act (SDWA), Toxic Substances Control Act (TSCA), and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The HERA Program is multidisciplinary and aimed at incorporating scientific innovations to advance analytic approaches and applications needed to address the wide-ranging risk assessment requirements to support implementation of these various statutes.

The current portfolio of HERA products encompasses these two topic areas:

- Science Assessments and Translation: HERA produces a portfolio of assessment products that optimizes the application of the best available science and technology and is responsive to Agency priorities and timelines. The portfolio includes assessments from among the traditional product lines Integrated Risk Information System (IRIS), Integrated Science Assessment (ISAs), and Provisional Peer-Reviewed Toxicity Values (PPRTVs) in addition to a wide range of innovative 'fit-for-purpose' products. Additionally, significant emphasis is placed on providing scientific and technical support throughout the lifecycle of decisions, from development to application of the assessment products.
- Advancing the Science and Practice of Risk Assessment: Research under this topic is targeted to enhance hazard characterization, expand the repertoire of dose-response methods and models, and characterize the utility of emerging data and new computational tools as applied to risk assessment. It also enhances and maintains critical assessment infrastructure, including databases, models, and software support, to ensure transparency and facilitate understanding and translation to Agency partners, external partners, and other users. Refinements to current approaches are expected to improve the accuracy, efficiency, flexibility, and utility of applications across a large landscape of assessment activities.

Recent Accomplishments of the HERA Program include:

The HERA Research Program has been developing assessment products to inform science-based decision making, enhance timely responses, improve screening capabilities, and augment toxicity value derivations for use in risk assessments.

- Portfolio of Assessment Products: In October 2020, the ISA for Oxides of Nitrogen, Oxides of Sulfur, and Particulate Matter - Ecological Criteria was released 142 following a peer review by the Clean Air Scientific Advisory Committee. HERA will provide the scientific foundation for the reconsiderations of the particulate matter and ozone National Ambient Air Quality Standards; a Supplement to the 2019 ISA for Particulate Matter¹⁴³ will be finalized in spring 2022. HERA continues to deliver on EPA's commitment to address Per- and polyfluoroalkyl substances (PFAS) in the environment and released the final Human Health Toxicity Values for Perfluorobutane Sulfonic Acid (CASRN 375-73-5) and Related Compound Potassium Perfluorobutane Sulfonate (CASRN 29420-49-3)¹⁴⁴ in April 2021, the draft IRIS Assessment for Perfluorobutanoic Acid and Related Salts 145 in August 2021, and the draft IRIS Assessment for Perfluorohexanoic Acid and Related Salts 146 in April 2022. In FY 2021, nine PPRTV assessments were finalized, and HERA anticipates delivering at least nine additional high-priority PPRTV assessments in FY 2022 to support Superfund priorities. ¹⁴⁷ In FY 2021, HERA also posted final IRIS assessments for ethyl tertiary butyl ether and tert-butyl alcohol, as well as publicly released assessment materials for inorganic mercury salts, vanadium and compounds (oral exposure), and vanadium and compounds (inhalation exposure). 148 In FY 2022, HERA anticipates publicly releasing a final IRIS assessment for Perfluorobutanoic acid and Related Salts. 149 HERA also anticipates publicly releasing assessment materials for ethylbenzene, uranium, vanadium and compounds (inhalation exposure), and naphthalene, and draft assessments for chloroform (inhalation), hexavalent chromium, and formaldehyde. HERA also will finalize the Office of Research and Development (ORD) Staff Handbook for Developing IRIS Assessments in FY 2022.
- Innovations in Risk Assessment: HERA continues to advance assessment science and modernize its assessment infrastructure through tool and model advancements. In FY 2021, HERA released updates to the Integrated Exposure Uptake Biokinetic (IEUBK) model to support lead biokinetic modeling in children. HERA anticipates finalizing 1) updates to the All-Ages Lead Model (AALM) in the fall of 2022 which will include improved lead biokinetic modeling in adults and children; and 2) EPA's version of the multi-path particle dosimetry (MPPD) model and software for improved mechanistic modeling of inhalation dosimetry for particles in the spring of 2022. Continued advancements are being made to HERA's dose-response analysis tool, Benchmark Dose

¹⁴² For more information, please see: https://www.epa.gov/isa/integrated-science-assessment-isa-oxides-nitrogen-oxides-sulfur-and-particulate-matter.

¹⁴³ For more information, please see: https://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=352823.

¹⁴⁴ For more information, please see: https://www.epa.gov/pfas/learn-about-human-health-toxicity-assessment-pfbs.

¹⁴⁵ For more information, please see: https://cfpub.epa.gov/ncea/iris_drafts/recordisplay.cfm?deid=350051.

¹⁴⁶ For more information, please see: https://cfpub.epa.gov/ncea/iris_drafts/recordisplay.cfm?deid=352767.

¹⁴⁷ For more information, please see: https://www.epa.gov/pprtv.

¹⁴⁸ For more information, please see: https://www.epa.gov/iris/iris-recent-additions.

¹⁴⁹ For more information, please see: https://www.epa.gov/iris/iris-recent-additions.

Software (BMDS),¹⁵⁰ as well as critical information management databases including HERA's *Health and Environmental Research Online*¹⁵¹ and the *Health Assessment and Workplace Collaborative*,¹⁵² contributing to the improvement in the science, structure, and interoperability of these critical assessment infrastructure tools. Accompanying innovations in assessment science in FY2021 and FY2022, HERA has emphasized and coordinated training in risk assessment practice, methods, and tools for EPA staff and stakeholders to enhance communication, understanding, and engagement.

FY 2023 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022-2026 EPA Strategic Plan*.

In FY 2023, the HERA Program's work will focus on efforts integral to achieving EPA priorities and informing the Agency's implementation of key environmental decisions. Specifically, the program will:

- Continue developing additional assessments through IRIS of perfluorinated compounds, as
 well as other priority chemicals identified by EPA's Water Program, Air and Radiation
 Program, and Land and Emergency Management Program. These HERA assessments
 include ethylbenzene, hexavalent chromium, chloroform, methylmercury, mercury salts,
 inorganic arsenic, and formaldehyde.
- Provide assessment, methodology, and modeling support to the Chemical Safety and Pollution Prevention Program on TSCA implementation for an array of chemicals, as well as support to the Air and Radiation Program, including the development of the ISA for Lead to support review of the National Ambient Air Quality Standards (NAAQS).
- Provide high-priority PPRTV human health assessments to support the Land and Emergency Management Program on CERCLA and Resource Conservation and Recovery Act (RCRA) implementation
- HERA will focus on support for specific decision contexts through a modernized assessment infrastructure, applying state of the science tools, databases, and models in assessment development and program management. Continue to develop and apply evidence mapping to provide a better understanding of the extent and nature of evidence available to address priority needs of the Agency and its partners.
- Provide the resources and workflow to two of the five Research and Development Program's Superfund technical support centers (TSCs)¹⁵³ to provide localized and tailored technical assistance and scientific expertise on human and ecological risk assessments to

¹⁵⁰ For more information, please see: https://www.epa.gov/bmds.

¹⁵¹ For more information, please see: https://hero.epa.gov/hero/.

¹⁵² For more information, please see: https://hawcprd.epa.gov/.

¹⁵³ HERA supports the Superfund Health Risk Technical Support Center (STSC) and the Ecological Risk Assessment Support Center (ERASC). For more information on EPA's five TSCs, please see: https://www.epa.gov/land-research/epas-technical-support-centers.

states, tribes, and EPA's program and regional offices. This includes direct support in cases of emergencies and other rapid response situations.

- Apply new and alternative approaches, methods, and data to risk assessment products, and technical support to better respond to the needs of the states, tribes, and EPA's program and regional offices, in cooperation with the Chemical Safety for Sustainability (CSS) Research Program.
- Provide training to staff, partners, and stakeholders on risk assessment practice, assessment tool literacy, and standard operating procedures for assessment development via easy-to-access modules.

In addition to the activities listed above, EPA also conducts research across programs in the following areas:

- **PFAS Research:** Per- and polyfluoroalkyl substances (PFAS) are a class of chemicals of concern in the environment, and EPA is committed to pursuing all options to address PFAS pollution and protect human health and the environment. There are still large numbers of PFAS of high interest to stakeholders which currently have no federal published, peer-reviewed toxicity values. As described in the *PFAS Strategic Roadmap*, ¹⁵⁴ within the HERA Research Program, EPA is prioritizing additional PFAS for development of peer-reviewed toxicity values. This will result in an expanded set of high-quality peer-reviewed toxicity values for use by federal, state, and tribal decision makers in making risk assessment and management decisions. In addition, EPA is identifying, reviewing, organizing, and presenting relevant health information on PFAS through systematic evidence mapping to identify data gaps, inform prioritization and hazard characterization, and facilitate human health assessments for PFAS.
- Lead: Childhood lead exposure continues to be one of the highest priorities for EPA. To advance the application of lead exposure and biokinetic models in EPA regulatory decisions and site assessments, HERA research will enhance, evaluate, and apply lead biokinetic models used to estimate potential blood lead levels for regulatory determinations. Additionally, the Exposure Factors Handbook provides up-to-date data on various human factors, including soil and dust ingestion rates, used by risk assessors.

Research Planning:

EPA is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is planned with their active involvement. Each research program is in the process of developing the fourth generation of the

¹⁵⁴ For more information, please see EPA's PFAS Strategic Roadmap at: https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap final-508.pdf

¹⁵⁵ For more information, please see: https://www.epa.gov/superfund/lead-superfund-sites-software-and-users-manuals.

¹⁵⁶ For more information, please see: https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236252.

StRAPs, which will continue the practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

ORD works with various groups, including communities, to ensure the integrity and value of its research through a variety of mechanisms that include:

- EPA's Board of Scientific Counselors (BOSC)
 - ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.
- State Engagement
 - EPA's state engagement¹⁵⁷ is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies.
- Tribal Partnerships
 - O Key tribal partnerships are established through the Tribal Science Program which provides a forum for the interaction between tribal and Agency representatives. These interactions identify research of mutual benefit and lead to collaborations on important tribal environmental science issues.

Performance Measure Targets:

Work under this program supports performance results in the Research: Chemical Safety for Sustainability Program under the S&T appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$1,233.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$3,640.0 / +20.0 FTE) This program change increases funding and FTE for the Health and Environmental Risk Assessment program. These FTE will assist in advancing science assessments, such as IRIS, as well as analytical approaches for the application of risk assessments. This investment includes \$3.618 million in payroll.

Statutory Authority:

Clean Air Act §§ 103, 108, 109, and 112; Clean Water Act §§ 101(a)(6), 104, 105; Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) § 3(c)(2)(A); Safe Drinking Water Act (SDWA) § 1458; Toxic Substances Control Act (TSCA).

¹⁵⁷ For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

Research: Safe and Sustainable Water Resources

Research: Safe and Sustainable Water Resources

Program Area: Research: Safe and Sustainable Water Resources Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Science & Technology	\$92,719	\$112,250	\$119,286	\$7,036
Total Budget Authority	\$92,719	\$112,250	\$119,286	\$7,036
Total Workyears	367.3	358.1	378.1	20.0

Program Project Description:

The quality and availability of water, upon which human and ecosystem health and a robust economy depend, face myriad challenges. These challenges include aging water infrastructure, contaminants of existing and emerging concern, waterborne pathogens, antimicrobial resistance, harmful algal blooms and hypoxia, stormwater runoff, and water shortages. Many of these concerns are more prevalent in disadvantaged and rural communities, and can be exacerbated by changing climate patterns, for example, higher temperatures and greater frequency, duration and intensity of precipitation, extreme heat, wildland fire, and drought.

To address these current, emerging, and long-term water resource challenges, EPA's Safe and Sustainable Water Resources (SSWR) Research Program produces robust research and scientific analyses for decision-making and the development of innovative, practical solutions for the Agency and its partners to protect and restore America's watersheds and water infrastructure.

SSWR research is integrated with other Office of Research and Development (ORD) national research programs to address water quality concerns related to wildland fire; revitalize land and prevent contamination through work on biosolids and green infrastructure; and ensure the safety of chemicals through research on lead and other chemical contaminants.

Recent Accomplishments of the SSWR Research Program¹⁵⁸

Contaminants of Emerging Concern:

• SARS-CoV-2. EPA collaborated with the Center for Disease Control and the State of Ohio to establish a wastewater monitoring network to detect and quantify SARS-CoV-2. EPA researchers rapidly developed and applied a method to detect SARS-CoV-2 in 12 sewersheds in Ohio. EPA also evaluated analytical approaches to detect variants of concern within wastewater. EPA helped to successfully establish Ohio's SARS-CoV-2 monitoring program and continues to provide analyses from wastewater treatment plants in southwest Ohio.

¹⁵⁸ For a more complete view of accomplishments, please see: https://www.epa.gov/research/national-research-programs.

Per- and Polyfluoroalkyl Substances (PFAS).

PFAS Treatment in Drinking Water. In 2021, EPA's Drinking Water Treatability Database was updated to include 37 PFAS chemicals. The database provides information on best practices and technologies for PFAS treatment in drinking water. Information on cost models for PFAS treatment in drinking water also was generated. EPA actively provides support to the Office of Water on PFAS treatment modeling for the development of the PFAS drinking water regulation.

PFAS Analytical Methods.

- EPA created and continues to update the PFAS Analytical Website, 159 which consolidates PFAS analytical and sampling methods for drinking water, groundwater, surface water, wastewater, air, and solids (soils, sediments, biota, and biosolids). The website includes analytical method resources from EPA and other federal agencies and non-governmental organizations, and sampling, data analysis, and laboratory certification resources.
- EPA finalized and published the SW846 Method 8327 for 24 PFAS in nondrinking water aqueous samples 160 and drinking water method 533 in support of the upcoming fifth Unregulated Contaminant Monitoring Rule. ORD completed a draft method for total absorbable PFAS in wastewater which is under review by the Office of Water (OW). EPA developed a draft isotope dilution method (Method 1633) for aqueous and solid samples for 40 PFAS in collaboration with the Department of Defense. ORD continues to provide technical support for the multi-laboratory validation of Method 1633 which will be complete by the end of calendar year 2022. Additionally, ORD continues to work with OW for development of a total organic fluorine method in drinking water for future validation.

Science to Support Recreational Water Quality Criteria:

Over the past five years, ORD scientists have published more than 40 peer-reviewed scientific publications providing science to support Recreational Water Quality Criteria recommendations. Notable efforts include the development of Standard Reference Material 2917 in collaboration with the National Institute of Standards and Technology, the public release of EPA Methods 1696 and 1697 for characterization of human fecal pollution in recreational waters, and performance assessment of virus-based fecal indicator methodologies, respectively. ORD research will play an important role in the anticipated EPA Office of Water 2022 Five-Year Review of the 2012 Recreational Water Quality Criteria.

Harmful Algal Blooms (HABs): In August 2021, ORD research enabled the release of a new tool - CyANWeb - expanding digital platforms beyond its CyAN Android app. The new web tool helps federal, state, tribal, and local partners identify when a harmful algal bloom may be forming in waters where people swim, fish, and boat. The tool uses satellite data for initial detection of a harmful algal bloom in more than 2,000 of the largest U.S. lakes and reservoirs. ORD also

and-sampling-research.

160 For more information, please see the following: https://www.epa.gov/water-research/pfas-analytical-methods-development- and-sampling-research.

¹⁵⁹ For more information, please see the following: https://www.epa.gov/water-research/pfas-analytical-methods-development-

developed a proof of concept for Decision Support System expansion to identify sub-watersheds within a larger basin for targeted nutrient control across New England.

FY 2023 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocate across strategic goals and objectives in the FY 2022-2026 EPA Strategic Plan.

In FY 2023, the SSWR Research Program will continue to focus on:

• Water Infrastructure:

- Oconduct research and provide technical support to assess the distribution, composition, and potential health risks of known and emerging chemical and biological contaminants. Protocols for sampling lead and identification of lead service lines will support the availability of safe drinking water, especially in disadvantaged communities.
- Ocontinue work to evaluate SARS-CoV-2 variants with the Ohio Network and determine the viability of live virus in wastewater; and assist states, communities, and utilities to address stormwater and wastewater infrastructure needs through applied models and technical assistance.

• Climate Change Impacts/Resiliency:

- o Integrate the impacts of climate change with research on water bodies and water infrastructure, including wildland fire, extreme drought and precipitation events, harmful algal blooms, and other impacts on water quality and availability.
- o Develop risk assessments on stormwater capture for enhanced aquifer recharge.
- Compare cost and carbon footprint of alternative water sources, develop risk assessments to support safe, fit-for-purpose non-potable use by tribes and states, and expand research to potable use.

• Harmful Algal Blooms/Nutrients:

- o Investigate toxicity and health effects from exposure to anatoxin-a, a potent cyanotoxin with neurological effects.
- Launch a joint EPA and USDA Challenge to better understand the potential role for enhanced efficiency fertilizers (EEFs) by assessing the efficacy of 16 EEFs in greenhouse trials.
- Complete approaches to prioritize watersheds for restoration and recovery efforts, including a visual tool to illustrate national nutrient inventories and watershed responsiveness to management actions.
- Recreational Waters and Public Health Protection: Improve methods for rapid and costeffective monitoring of waterborne pathogens in recreational waters. For example, improving rapid low-cost methods for real time notifications on the presence of pathogens will inform community decisions to close and reopen beaches more quickly to prevent human illness and unnecessary lost revenue.

Microplastics: Continue refinement of methods to collect, extract, characterize, quantify, and evaluate microplastics in surface water and sediment. Characterizing the smaller micro- and nanoplastic particles will be the emphasis. These standard methods will allow comparability across studies and aid in comprehensive exposure assessment and risk characterization of microplastics. The research also will include activities to assess new methods to rapidly identify microplastics in sediment with a citizen science project.

In addition to the activities listed above, EPA also will conduct research across programs in the following areas:

• **PFAS Research:** PFAS are a class of chemicals of growing concern in the environment, and EPA has committed to taking action to support states, tribes, and local communities understand and manage risks associated with these chemicals. A significant challenge for risk managers at the tribal, state, and local level is how to identify and remove or treat PFAS chemicals that are impacting drinking water supplies. Additional knowledge is needed regarding how to measure and quantify different PFAS chemicals in water, how to remove or treat PFAS chemicals when detected, and how to estimate the cost of different treatment alternatives so that utilities can make informed investment decisions. In FY 2023, EPA will increase its PFAS research efforts, with specific emphasis on implementing the *PFAS Strategic Roadmap*. ¹⁶¹

Within the SSWR Research Program, EPA is:

- O Developing and validating standard methods for measuring different PFAS chemicals in water and water treatment residuals (e.g., biosolids);
- o Reviewing available literature on effectiveness and cost data for different water treatment technologies applied to different PFAS chemicals; and
- o Conducting pilot- and bench-scale testing of the most promising technologies to further evaluate effectiveness.

This work is being done in collaboration with water utilities and water treatment technology suppliers. The results of this work will be posted to EPA's public Drinking Water Treatability Database so the information will be widely available to stakeholders. ¹⁶²

• Lead: EPA, the Centers for Disease Control and Prevention, and the American Academy of Pediatrics unanimously agree that there is no safe level of lead in a child's blood and that even low levels can result in behavior and learning problems, lower IQ, and other health effects. ¹⁶³ In response to overwhelming scientific consensus and continued public health concern, reducing childhood lead exposure is one of the highest priorities for EPA. ¹⁶⁴

¹⁶¹ See EPA's PFAS Strategic Roadmap at: https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap final-508.pdf

¹⁶² For more information, please see: https://iaspub.epa.gov/tdb/pages/general/home.do#content.

¹⁶³ For more information, please see: https://www.cdc.gov/nceh/lead/prevention/blood-lead-levels.htm.

¹⁶⁴ For more information, please see: https://www.epa.gov/lead.

SSWR research focuses on:

- o Establishing reliable models for estimating lead exposure from drinking water;
- o Developing improved sampling techniques and strategies for identifying and characterizing lead in plumbing materials, including lead service lines;
- o Developing guidance on optimizing lead mitigation strategies; and
- Testing and evaluating treatment processes for removing lead from drinking water. The overall impact of this research will provide information and tools that EPA, states, tribes, utilities, and communities can use to minimize or eliminate lead exposure in drinking water.

Research Planning:

EPA is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is planned with their active involvement. Each research program is in the process of developing the fourth generation of the StRAPs, which will continue the practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

ORD works with various groups, including communities, to ensure the integrity and value of its research through a variety of mechanisms that include:

- EPA's Board of Scientific Counselors (BOSC)
 - o ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.
- State Engagement
 - EPA's state engagement¹⁶⁵ is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies.
- Tribal Partnerships
 - Key tribal partnerships are established through the Tribal Science Program which provides a forum for the interaction between tribal and Agency representatives. These interactions identify research of mutual benefit and lead to collaborations on important tribal environmental science issues.

Performance Measure Targets:

(PM RD1) Percentage of ORD research products meeting partner needs.FY 2022
TargetFY 2023
Target9394

¹⁶⁵ For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

(PM RD2) Number of ORD activities related to environmental justice that involve or are designed to be applicable to tribes, states, territories, local	FY 2022 Target	FY 2023 Target
governments, and communities.	No Target Established	TBD
(PM RD4) Percentage of ORD environmental justice-related research	FY 2022	FY 2023
products meeting partner needs.	Target	Target
	93	94
(PM RD5) Number of actions implemented for EPA scientific integrity	FY 2022	FY 2023
objectives.	Target	Target

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$2,993.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

No Target

Established

21

- (+\$116.0) This change to fixed and other costs is an increase due to the recalculation of laboratory fixed costs.
- (+\$250.0) This program change increases funding for EPA's PFAS research efforts, with specific emphasis on implementing the *PFAS Strategic Roadmap*.
- (+\$3,677.0 / +20.0 FTE) This net program change increases funding and FTE for the Safe and Sustainable Water Resources Program. These FTE will help to address the challenges of aging water infrastructure, contaminants of concern, harmful algal blooms, and diminished water availability. This investment includes \$3.567 million in payroll.

Statutory Authority:

Safe Drinking Water Act (SDWA) § 1442(a)(1); Clean Water Act §§ 101(a)(6), 104, 105; Environmental Research, Development, and Demonstration Authorization Act (ERDDAA); Marine Protection, Research, and Sanctuaries Act (MPRSA) § 203; Title II of Ocean Dumping Ban Act of 1988 (ODBA); Water Resources Development Act (WRDA); Wet Weather Water Quality Act of 2000; Marine Plastic Pollution Research and Control Act of 1987 (MPPRCA); National Invasive Species Act; Coastal Zone Amendments Reauthorization Act (CZARA); Coastal Wetlands Planning, Protection and Restoration Act; Endangered Species Act (ESA); North American Wetlands Conservation Act; Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); Toxic Substances Control Act (TSCA).

Research: Sustainable Communities

Research: Sustainable and Healthy Communities

Program Area: Research: Sustainable Communities Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Science & Technology	\$112,717	\$133,000	\$141,477	\$8,477
Leaking Underground Storage Tanks	\$303	\$320	\$337	\$17
Inland Oil Spill Programs	\$1,149	\$664	\$674	\$10
Hazardous Substance Superfund	\$13,458	\$16,463	\$16,927	\$464
Total Budget Authority	\$127,626	\$150,447	\$159,415	\$8,968
Total Workyears	442.3	421.8	441.8	20.0

Program Project Description:

EPA's Sustainable and Healthy Communities (SHC) Research Program supports the following broad community-based goals: 1) accelerate the pace of contaminated site cleanups; 2) return contaminated sites to beneficial use in their communities; 3) protect vulnerable groups, such as communities with environmental justice concerns and children; 4) revitalize the most vulnerable communities; and 5) understand the connections between healthy ecosystems, healthy people, and healthy communities. SHC research provides decision-makers with the latest scientific information on how the interrelationships between socio-economic, human health, and environmental factors impact the environmental health of communities. The research and tools generated, including those related to health disparities and social determinants of health, aim to minimize negative, unintended consequences to human health and the environment and promote resilience to the impacts of climate change across communities.

The SHC Research Program has made a commitment to foster environmental, public health, and economic benefits for overburdened communities. Remedial technologies will directly support communities with environmental justice concerns and accelerate solutions for the risks that contaminated sites pose to underserved communities. The SHC program will focus on systems approaches that consider how remediation and other technologies can reduce risk to sensitive populations and improve climate adaptation and climate resilience. SHC will apply an integrated systems approach to incorporate diverse data streams for increased understanding of linkages between the total environment (built, natural and social) and public health to support communities and will highlight climate change and environmental justice related research throughout the program.

Recent Accomplishments of the SHC Research Program include:

- Beneficial Use of Dredged Materials: Opportunities, Community Benefits, and Applied Guidance (Published in December 2020):166 Federal navigation channels throughout the US are maintained through operations and maintenance dredging of rivers and harbors. Much of this material is disposed through open water or contained disposal facility placement. While dredged materials may contain contaminants, there is a significant amount of material that is clean and may have beneficial uses in society. Thus, there is increased pressure to identify beneficial uses for dredged material, such as contaminated site remediation and aquatic habitat restoration. This project identified barriers and opportunities related to using clean dredged materials to remediate contaminated sites along with providing a tool for municipalities and other agencies to better understand the social and ecological benefits of utilizing dredged materials in cleanups or habitat restoration. The research team utilized and augmented the EPA EcoService Models Library; developed a representative case study database; and produced a report to support decision-making for dredged materials. This project created a foundation of information, a use-refined tool, and a concept map to guide application for different stakeholders in future projects.
- Supply Chain Emission Factors for US Commodities and Industries (Published in July 2020): 167 Researchers developed a comprehensive set of supply chain emission factors covering all categories of goods and services in the US economy. Purchased goods and services and capital goods represent a significant source of emission for many organizations. The final emission factors are available in the Supply Chain Emission Factors for US Industries and Commodities dataset. Organizations can use these supply chain factors to calculate the life cycle greenhouse gas (GHG) emissions/carbon footprints of their purchases, or for reporting Scope 3 GHG emissions under the global Greenhouse Gas Protocol.

FY 2023 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022-2026 EPA Strategic Plan*.

SHC's FY 2023 research will focus on three topic areas: 1) Advancing Remediation and Restoration of Contaminated Sites; 2) Materials Management and Beneficial Reuse of Waste; and 3) Integrated Systems Approach to Building Healthy and Resilient Communities. This research will integrate and translate public health, environmental engineering, and ecosystem science to provide:

• Remediation solutions through permanent remedies, accounting for climate change, and innovative treatment technologies for returning contaminated sites to safe and productive use:

167 For more information, please see: https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryId=349324&Lab=CESER.

¹⁶⁶ For more information, please see: https://intranet.ord.epa.gov/sites/default/files/2021-01/DMMT%20RESES%20Final%20Report 508.pdf.

- Tools for sustainable materials management and beneficial reuse of materials; and
- Approaches for revitalizing communities, particularly those that are underserved and overburdened, including but not limited to those impacted by climate change.

The SHC Research Program provides state-of-the-science methods, models, tools, and technologies to the Land and Emergency Management Program for use in programmatic guidance and to support EPA decision makers with in-site cleanup. These approaches will address contaminated sediments and groundwater, as well as health risks posed by vapor intrusion and chemicals of immediate concern, such as per- and polyfluoroalkyl substances (PFAS) and lead. To support prevention of future land contamination problems, SHC develops life cycle analysis tools and explores opportunities for beneficial reuse of materials to reduce environmental impact. Finally, SHC research and development also will provide programs, regional partners, and local communities with research and tools they can apply to assess how they can become more resilient to and adapt to climate change. This community-oriented research is designed to revitalize communities, support the protection of children's health, and address critical health impacts on vulnerable populations. These efforts support community sustainability and increase community resilience to natural disasters including those impacted by climate change.

Specifically, in FY 2023, SHC Research will conduct research in the following areas:

- Advancing Remediation and Restoration of Contaminated Sites: EPA research under this topic will primarily focus on developing and testing remedial alternatives for treating contaminated soils, sediments, groundwater sites, vapor intrusion sites, and sites with PFAS and lead contamination, along with providing technical support to the Office of Land and Emergency Management (OLEM), regions, tribes, and states to translate the research into usable approaches.
- **PFAS Research:** PFAS will continue to be an important research topic for SHC. SHC is specifically researching analytical methods, human exposure, contaminated sites source zones, hard to treat streams such as landfill leachate, fate and transport of PFAS in groundwater, remediation performance (treatability and cost models), immobilization/stabilization of PFAS, and novel remedial technologies. This work provides technical support and assistance to tribes, states, and local communities on issues pertaining to ecological and human health risk assessment and site engineering challenges related to PFAS. In FY 2023, EPA is investing additional funds in PFAS research, with specific emphasis on implementing the *PFAS Strategic Roadmap*. ¹⁶⁸
- Lead Research: The SHC Research Program is working to identify locations of high exposures and blood lead levels to target lead sources for mitigation. The research program also will develop innovative methods to clean up lead at Superfund and other contaminated sites and strengthen the scientific basis of the Agency's lead-related regulatory and clean-up decisions. The SHC Research Program also will enhance models and methods that determine key drivers of blood lead levels to inform regulatory decisions, develop tools to identify and prioritize communities with higher incidence of increased blood lead levels in

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¹⁶⁸ See EPA's PFAS Strategic Roadmap at: https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap final-508.pdf

children, and provide the data needed to reduce uncertainty in lead exposure and risk analysis. EPA's research in this area is essential to support ongoing Agency efforts, as well as filling in the data gaps for federal partners, tribes, states, and local communities.

- Materials Management and Beneficial Reuse of Waste: EPA research under SHC's Materials Management and Beneficial Reuse of Waste aims to strengthen the scientific basis for the Nation's materials management decisions and guidance at the tribal, state, and community levels. The overall goal of this research is to increase sustainability through reducing waste and supporting more circular economies, including supporting the implementation of the 2021 National Recycling Strategy. Primary research efforts will focus on developing lifecycle-based assessment tools for sustainable materials management, evaluating the design, application, and use of landfills as well as the degradation of liner material and improved monitoring strategies and their long-term impact on human health and the environment, and developing waste-management methodologies that can minimize adverse impacts to human health and the environment through proposed beneficial use and reuse. This work will include research that increases the effectiveness of food waste campaigns and examines food waste collection and pretreatment technologies from a lifecycle perspective. These efforts support an agencywide goal to reduce domestic food loss and waste by half by the year 2030. 169
- Integrated Systems Approach to Building Healthy and Resilient Communities: The SHC Research Program will evaluate and communicate the benefits from remediation, restoration, and revitalization of contaminated sites and provide community-driven solutions with measurable outcomes. These efforts will help communities meet their needs for building resilience to the impacts of climate change, including the health and well-being of those most vulnerable. Research under the Healthy and Resilient Communities topic will provide the scientific basis for guidance, best practices, and tools to support decisions by the Agency, its stakeholders, tribes, and states to optimize health and well-being outcomes while minimizing unintended consequences. In addition, EPA is investing funds to increase protection of communities located near the fence line of industrial facilities.

Research Planning:

EPA research is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is planned with their active involvement. Each research program is in the process of developing the fourth generation of the StRAPs, which will continue the practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

The Office of Research and Development (ORD) works with various groups, including communities, to ensure the integrity and value of its research through a variety of mechanisms that include:

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¹⁶⁹ For more information, please visit: https://www.epa.gov/sustainable-management-food.

- EPA's Board of Scientific Counselors (BOSC)
 - ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.

• State Engagement

• EPA's state engagement¹⁷⁰ is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies.

• Tribal Partnerships

Key tribal partnerships are established through the Tribal Science Program which provides a forum for the interaction between tribal and Agency representatives. These interactions identify research of mutual benefit and lead to collaborations on important tribal environmental science issues.

Performance Measure Targets:

FY 2022	FY 2023
Target	Target
93	94
FY 2022	FY 2023
Target	Target
No Target	TBD
Established	IDD
FY 2022	FY 2023
Target	Target
93	94
FY 2022	FY 2023
Target	Target
No Target	21
	FY 2022 Target No Target Established FY 2022 Target 93 FY 2022 Target Target

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$3,094.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$106.0) This change to fixed and other costs is an increase due to the recalculation of laboratory fixed costs.

¹⁷⁰ For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

- (+\$1,356.0) This program change increases funding for EPA's PFAS research efforts, with specific emphasis on implementing the *PFAS Strategic Roadmap*.
- (+\$200.0) This program change increases resources to fund protection of communities located near the fence line of industrial facilities.
- (+\$3,721.0 / +20.0 FTE) This net program change increases funding and FTE for the Sustainable and Healthy Communities Research Program. These FTE will help to address the acceleration of cleanup and return of contaminated sites to beneficial use, protection of vulnerable populations, and the revitalization of vulnerable communities. This investment includes \$3.576 million in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5 App.) (EPA's organic statute).

Water: Human Health Protection

Drinking Water Programs

Program Area: Ensure Safe Water Goal: Ensure Clean and Safe Water for All Communities Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$97,190	\$106,903	\$133,258	\$26,355
Science & Technology	\$4,088	\$4,364	\$6,776	\$2,412
Total Budget Authority	\$101,278	\$111,267	\$140,034	\$28,767
Total Workyears	480.3	475.2	547.2	72.0

Program Project Description:

The Drinking Water Technical Support Center is responsible for a range of activities to address drinking water contamination. The Center:

- leads the collection of national occurrence data for unregulated contaminants in drinking water:
- develops, evaluates, and approves analytical methods that are used to accurately and reliably monitor drinking water contaminants;
- leads the national program under which laboratories are certified to conduct the analyses of drinking water contaminants with approved analytical methods; and,
- collaborates with states and public water systems to implement tools that optimize treatment and improve water quality by helping systems achieve compliance and maximize technical capacity while reducing operational costs.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*. The program also will support the Agency's Infrastructure Investment and Jobs Act implementation priorities.

In FY 2023, EPA is requesting funding for the Drinking Water Technical Support Center to carry out the activities listed below:

- Lead rule development and implementation activities for the Unregulated Contaminant Monitoring Rule (UCMR), a federal direct implementation program coordinated by EPA, as directed by the Safe Drinking Water Act (SDWA).
 - The data collected pursuant to this rule support the Agency's determination of whether to establish health-based standards to protect public health. Data reporting under the UCMR's fourth cycle (UCMR 4) concluded at the end of calendar year (CY) 2021. EPA compiled and published the final data set for the fourth cycle in FY 2022.

- In December 2021, the Agency published the final rule for the UCMR's fifth cycle (UCMR 5). EPA is conducting pre-monitoring implementation activities throughout CY 2022 to prepare for the upcoming UCMR 5 sampling period from January 2023 through December 2025.
- O UCMR 5 is the first cycle to implement the monitoring provisions of America's Water Infrastructure Act of 2018 (AWIA), which requires, subject to the availability of appropriations and adequate laboratory capacity, sampling at all small public water systems (PWSs) serving between 3,300 and 10,000 persons. AWIA also requires monitoring at a representative sample of small PWSs serving fewer than 3,300 persons. EPA implementation efforts need to significantly expand to address a 7.5-fold increase in the number of small-system samples as a result of AWIA.
- EPA is responsible for managing and funding the small-system monitoring. Key activities for EPA include ensuring laboratories are available to perform the required analyses, managing the field sample collection and sample analysis for small systems, and managing data reporting by large systems. In addition, EPA makes the UCMR data available to state and tribal partners and to the public.
- Lead the development, revision, evaluation, and approval of analytical methods for unregulated and regulated contaminants in drinking water to assess and ensure protection of public health (e.g., polyfluoroalkyl substances [PFAS]). This work supports the activities underway for the Agency's PFAS Roadmap and is expected to support priorities identified by the EPA Council on PFAS.
- Implement EPA's Drinking Water Laboratory Certification Program, ¹⁷¹ which sets direction for oversight of state, municipal, and commercial laboratories that analyze drinking water samples. EPA will conduct regional laboratory certification program reviews and deliver laboratory certification officer training courses (chemistry and microbiology) for state and regional representatives. The certification program and trainings will help to ensure the quality of drinking water analyses conducted in FY 2023.
- Partner with states and water systems to optimize their treatment technology and distribution systems under the drinking water Area Wide Optimization Program (AWOP). AWOP is a highly successful technical/compliance assistance and training program that enhances the ability of public water systems to comply with existing microbial, disinfectant, and disinfection byproduct standards, and to address distribution system integrity and water quality issues. During FY 2023, EPA expects to work with states and tribes to expand efforts to train and assist systems, including those in disadvantaged and tribal communities. This effort includes identifying performance limiting factors at public water systems and developing and applying tailored tools to help them overcome operational challenges, achieve performance and optimization levels, and address health-based compliance challenges. The technical assistance provided by AWOP can be instrumental in supporting public water systems with limited financial capacity to effectively address drinking water quality issues.

¹⁷² For more information, please see: https://www.epa.gov/sdwa/optimization-program-drinking-water-systems.

¹⁷¹ For more information, please see: https://www.epa.gov/dwlabcert.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act (SDWA) implementation and compliance and requirements in the Drinking Water State Revolving Fund and Categorical Grant: Public Water System Supervision Programs under the STAG appropriation to support safe drinking water for the nation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$187.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$187.0 / +1.0 FTE) This program change is an increase in resources and FTE to support the activities associated with the Evidence Act. This investment includes \$182.0 thousand in payroll.
- (+\$2,038.0 / +4.0 FTE) This program change is an increase in resources and FTE to support regulatory analysis, development and training, and technical assistance for state, tribal, and local communities to address drinking water contaminants (including Lead and PFAS) in their efforts to ensure safe and affordable drinking water. The increase also supports development of the Lead and Copper Rule Revisions and the Unregulated Contaminant Monitoring Rule. This investment includes \$729.0 thousand in payroll.

Statutory Authority:

SDWA.

Congressional Priorities

Water Quality Research and Support Grants

Program Area: Clean and Safe Water Technical Assistance Grants Goal: Ensure Clean and Safe Water for All Communities Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$0	\$21,700	\$0	-\$21,700
Science & Technology	\$0	\$7,500	\$0	-\$7,500
Total Budget Authority	\$0	\$29,200	\$0	-\$29,200

Program Project Description:

In FY 2021 and in the FY 2022 Annualized Continuing Resolution, Congress appropriated \$7.5 million in the Science and Technology appropriation to fund high priority water quality and water availability research. EPA was instructed by Congress to award grants on a competitive basis, independent of the Science to Achieve Results (STAR) Program, and to give priority to not-for-profit organizations that: 1) conduct activities that are national in scope; 2) can provide a 25 percent match, including in-kind contributions; and 3) often partner with the Agency.

FY 2023 Activities and Performance Plan:

Resources are proposed for elimination for this Program in FY 2023.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (-\$7,500.0) Resources are proposed for elimination for this program in FY 2023. The goals of this program can be accomplished through core statutory programs.

Statutory Authority:

CAA 42 U.S.C. 7401 et seq. Title 1, Part A – Sec. 103 (a) and (d) and Sec. 104 (c); CAA 42 U.S.C. 7402(b) Section 102; CAA 42 U.S.C. 7403(b)(2) Section 103(b)(2); Clinger Cohen Act, 40 U.S.C. 11318; CERCLA (Superfund, 1980) Section 209(a) of Public Law 99-499; Children's Health Act; CWA, Sec. 101 - 121; CWPPRA; CZARA; CZMA 16 U.S.C. 1451 - Section 302; Economy Act, 31 U.S.C. 1535; EISA, Title II Subtitle B; ERDDA, 33 U.S.C. 1251 – Section 2(a); ESA, 16 U.S.C. 1531 - Section 2; FFDCA, 21 U.S.C. Sec. 346; FIFRA (7 U.S.C. s/s 136 et seq. (1996), as amended), Sec. 3(c)(2)(A); FQPA PL 104-170; Intergovernmental Cooperation Act, 31 U.S.C.

6502; MPRSA Sec. 203, 33 U.S.C. 1443; NAWCA; NCPA; National Environmental Education Act, 20 U.S.C. 5503(b)(3) and (b)(11); NEPA of 1969, Section 102; NISA; ODBA Title II; PPA, 42 U.S.C. 13103; RCRA; SDWA (1996) 42 U.S.C. Section 300j-18; SDWA Part E, Sec. 1442 (a)(1); TSCA, Section 10, 15, 26, U.S.C. 2609; USGCRA 15 U.S.C. 2921; WRDA; WRRA; and WWWQA.

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APPROPRIATION: Environmental Programs & Management Resource Summary Table

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management				
Budget Authority	\$2,572,857	\$2,761,550	\$3,796,280	\$1,034,730
Total Workyears	8,677.8	8,883.4	10,332.1	1,448.7

Bill Language: Environmental Programs and Management

For environmental programs and management, including necessary expenses not otherwise provided for, for personnel and related costs and travel expenses; hire and purchase of passenger motor vehicles, including zero emission passenger motor vehicles; hire, maintenance, and operation of aircraft; purchase of reprints; library memberships in societies or associations which issue publications to members only or at a price to members lower than to subscribers who are not members; administrative costs of the brownfields program under the Small Business Liability Relief and Brownfields Revitalization Act of 2002; implementation of a coal combustion residual permit program under section 2301 of the Water and Waste Act of 2016; and not to exceed \$9,000 for official reception and representation expenses, 3,796,280,000, to remain available until September 30, 2024: Provided, That of the funds included under this heading, \$578,336,000 shall be for Geographic Programs specified in the explanatory statement: Provided further, That of the funds included under this heading, the Chemical Risk Review and Reduction program project shall be allocated for this fiscal year, excluding the amount of any fees appropriated, not less than the amount of appropriations for that program project for fiscal year 2014: Provided further, That of the funds included under this heading, \$140,000,000, to remain available until expended, shall be for environmental justice implementation grants, of which \$50,000,000 shall be for competitive grants to reduce the disproportionate health impacts of environmental pollution in the environmental justice community; \$25,000,000 shall be for an Environmental Justice Community Grant Program for grants to nonprofits to reduce the disproportionate health impacts of environmental pollution in the environmental justice community; \$25,000,000 shall be for an Environmental Justice State Grant Program for grants to states to create or support state environmental justice programs; \$25,000,000 shall be for a Tribal Environ- mental Justice Grant Program for grants to tribes or intertribal consortia to support tribal work to eliminate disproportionately adverse human health or environmental effects on environmental justice communities in Tribal and indigenous communities; and \$15,000,000 shall be for a competitive Community-based Participatory Research Grant Program for grants to institutions of higher education to develop partnerships with community-based organizations to improve the health outcomes of residents and workers in environmental justice communities: Provided further, That up to 5% of the funds provided by the previous proviso may be reserved for salaries, expenses, and administration: Provided further, That of the funds included under this heading, \$10,000,000,

to remain available until expended, shall be for an Environmental Justice Training Program for grants to nonprofits for multi-media or single media activities to increase the capacity of residents of underserved communities to identify and address disproportionately adverse human health or environ-mental effects of pollution: Provided further, That up to 5% of the funds provided by the previous proviso may be reserved for salaries, expenses, and administration.

Note.—A full-year 2022 appropriation for this account was not enacted at the time the Budget was prepared; therefore, the Budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of Public Law 117-43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.

Program Projects in EPM

(Dollars in Thousands)

		,		FY 2023 President's
	FY 2021	FY 2022 Annualized	FY 2023 President's	Budget v. FY 2022 Annualized
Program Project	Final Actuals	CR	Budget	CR
Cl. A: 1 Cl: 4				
Clean Air and Climate				
Clean Air Allowance Trading Programs	\$12,920	\$13,153	\$23,523	\$10,370
Climate Protection	\$91,632	\$97,000	\$125,216	\$28,216
Federal Stationary Source Regulations	\$19,317	\$20,733	\$41,617	\$20,884
Federal Support for Air Quality Management	\$131,015	\$138,020	\$289,010	\$150,990
Stratospheric Ozone: Domestic Programs	\$4,805	\$4,633	\$26,607	\$21,974
Stratospheric Ozone: Multilateral Fund	\$8,326	\$8,711	\$18,000	\$9,289
Subtotal, Clean Air and Climate	\$268,013	\$282,250	\$523,973	\$241,723
Indoor Air and Radiation				
Indoor Air: Radon Program	\$2,224	\$3,136	\$5,004	\$1,868
Radiation: Protection	\$8,283	\$7,661	\$10,588	\$2,927
Radiation: Response Preparedness	\$2,703	\$2,404	\$3,004	\$600
Reduce Risks from Indoor Air	\$10,968	\$11,750	\$23,542	\$11,792
Subtotal, Indoor Air and Radiation	\$24,178	\$24,951	\$42,138	\$17,187
Brownfields				
Brownfields	\$22,136	\$24,000	\$36,842	\$12,842
Compliance				
Compliance Monitoring	\$97,583	\$102,500	\$144,770	\$42,270
Enforcement				

Program Project	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Civil Enforcement	\$164,888	\$168,341	\$210,011	\$41,670
Criminal Enforcement	\$49,588	\$51,275	\$61,411	\$10,136
NEPA Implementation	\$15,809	\$16,943	\$19,883	\$2,940
Subtotal, Enforcement	\$230,285	\$236,559	\$291,305	\$54,746
Environmental Justice				
Environmental Justice	\$10,343	\$11,838	\$294,938	\$283,100
Geographic Programs				
Geographic Program: Chesapeake Bay	\$77,876	\$87,500	\$90,568	\$3,068
Geographic Program: Gulf of Mexico	\$5,335	\$20,000	\$22,524	\$2,524
Geographic Program: Lake Champlain	\$14,996	\$15,000	\$20,000	\$5,000
Geographic Program: Long Island Sound	\$30,361	\$30,400	\$40,002	\$9,602
Geographic Program: Other				
Lake Pontchartrain	\$0	\$1,900	\$1,932	\$32
S.New England Estuary (SNEE)	\$5,152	\$5,500	\$6,252	\$752
Geographic Program: Other (other activities)	\$1,579	\$3,000	\$3,024	\$24
Subtotal, Geographic Program: Other	\$6,731	\$10,400	\$11,208	\$808
Great Lakes Restoration	\$306,380	\$330,000	\$340,111	\$10,111
Geographic Program: South Florida	\$1,369	\$6,000	\$7,202	\$1,202
Geographic Program: San Francisco Bay	\$6,718	\$8,922	\$12,004	\$3,082
Geographic Program: Puget Sound	\$32,946	\$33,750	\$35,016	\$1,266
Subtotal, Geographic Programs	\$482,712	\$541,972	\$578,635	\$36,663
Homeland Security				
Homeland Security: Communication and Information	\$3,893	\$4,145	\$4,650	\$505
Homeland Security: Critical Infrastructure Protection	\$733	\$909	\$1,014	\$105
Homeland Security: Protection of EPA Personnel and Infrastructure	\$4,915	\$4,959	\$5,139	\$180
Subtotal, Homeland Security	\$9,540	\$10,013	\$10,803	\$790
Information Exchange / Outreach				

Program Project	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Local Prevention and				
Preparedness TRI / Right to Know	\$13,402	\$13,736	\$22,908	\$9,172 \$469
Tribal - Capacity Building	\$12,689 \$12,945	\$13,206 \$12,902	\$13,675 \$16,386	\$3,484
Executive Management and Operations	\$48,837	\$46,836	\$63,256	\$16,420
Environmental Education	\$3,311	\$8,580	\$8,668	\$10,420
Exchange Network	\$13,713	\$14,084	\$14,413	\$329
Small Minority Business Assistance	\$13,713	\$1,680	\$1,935	\$255
Small Business Ombudsman	\$1,730	\$1,778	\$2,183	\$405
Children and Other Sensitive	\$1,230	\$1,778	\$2,163	\$403
Populations: Agency Coordination	\$8,277	\$6,173	\$6,362	\$189
Subtotal, Information Exchange / Outreach	\$116,181	\$118,975	\$149,786	\$30,811
International Programs				
US Mexico Border	\$2,818	\$2,837	\$3,275	\$438
International Sources of Pollution	\$6,409	\$6,746	\$11,758	\$5,012
Trade and Governance	\$5,894	\$5,292	\$6,187	\$895
Subtotal, International Programs	\$15,121	\$14,875	\$21,220	\$6,345
IT / Data Management / Security				
Information Security	\$6,765	\$8,285	\$23,739	\$15,454
IT / Data Management	\$74,013	\$82,715	\$98,452	\$15,737
Subtotal, IT / Data Management / Security	\$80,777	\$91,000	\$122,191	\$31,191
Legal / Science / Regulatory / Economic Review				
Integrated Environmental Strategies	\$9,614	\$9,475	\$40,912	\$31,437
Administrative Law	\$3,768	\$4,975	\$5,882	\$907
Alternative Dispute Resolution	\$533	\$864	\$1,175	\$311
Civil Rights Program	\$8,968	\$9,205	\$25,869	\$16,664
Legal Advice: Environmental Program	\$55,700	\$49,595	\$76,855	\$27,260
Legal Advice: Support Program	\$16,645	\$15,865	\$18,892	\$3,027
Regional Science and Technology	\$466	\$638	\$4,923	\$4,285
Science Advisory Board	\$3,422	\$3,205	\$3,981	\$776
Regulatory/Economic-Management and Analysis	\$13,850	\$12,421	\$16,247	\$3,826

Program Project	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Subtotal, Legal / Science / Regulatory / Economic Review	\$112,967	\$106,243	\$194,736	\$88,493
Operations and Administration				
Central Planning, Budgeting, and Finance	\$71,528	\$76,718	\$89,154	\$12,436
Facilities Infrastructure and Operations	\$257,524	\$285,441	\$288,293	\$2,852
Acquisition Management	\$30,623	\$32,247	\$40,017	\$7,770
Human Resources Management	\$48,256	\$46,229	\$66,087	\$19,858
Financial Assistance Grants / IAG Management	\$27,294	\$25,430	\$33,040	\$7,610
Subtotal, Operations and Administration	\$435,225	\$466,065	\$516,591	\$50,526
Pesticides Licensing				
Science Policy and Biotechnology	\$1,287	\$1,546	\$1,580	\$34
Pesticides: Protect Human Health from Pesticide Risk	\$58,124	\$60,181	\$62,726	\$2,545
Pesticides: Protect the Environment from Pesticide Risk	\$36,714	\$39,543	\$45,876	\$6,333
Pesticides: Realize the Value of Pesticide Availability	\$6,034	\$7,730	\$7,979	\$249
Subtotal, Pesticides Licensing	\$102,159	\$109,000	\$118,161	\$9,161
Research: Chemical Safety for Sustainability				
Research: Chemical Safety for Sustainability	\$115	\$0	\$0	\$0
Resource Conservation and Recovery Act (RCRA)				
RCRA: Corrective Action	\$33,921	\$38,453	\$39,820	\$1,367
RCRA: Waste Management	\$59,769	\$70,465	\$79,743	\$9,278
RCRA: Waste Minimization & Recycling	\$8,404	\$9,982	\$10,444	\$462
Subtotal, Resource Conservation and Recovery Act (RCRA)	\$102,095	\$118,900	\$130,007	\$11,107
Toxics Risk Review and Prevention				
Endocrine Disruptors	\$5,209	\$7,533	\$7,614	\$81

Program Project	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Pollution Prevention Program	\$11,476	\$12,558	\$17,121	\$4,563
Toxic Substances: Chemical Risk Review and Reduction	\$72,643	\$60,280	\$124,243	\$63,963
Toxic Substances: Lead Risk Reduction Program	\$11,991	\$13,129	\$13,749	\$620
Subtotal, Toxics Risk Review and Prevention	\$101,318	\$93,500	\$162,727	\$69,227
Underground Storage Tanks (LUST / UST)				
LUST / UST	\$10,373	\$11,250	\$12,564	\$1,314
Protecting Estuaries and Wetlands				
National Estuary Program / Coastal Waterways	\$29,496	\$31,822	\$32,184	\$362
Wetlands	\$18,562	\$19,300	\$25,637	\$6,337
Subtotal, Protecting Estuaries and Wetlands	\$48,058	\$51,122	\$57,821	\$6,699
Ensure Safe Water				
Beach / Fish Programs	\$1,146	\$1,584	\$1,827	\$243
Drinking Water Programs	\$97,190	\$106,903	\$133,258	\$26,355
Subtotal, Ensure Safe Water	\$98,335	\$108,487	\$135,085	\$26,598
Ensure Clean Water				
Marine Pollution	\$8,206	\$9,468	\$12,299	\$2,831
Surface Water Protection	\$197,137	\$206,882	\$239,688	\$32,806
Subtotal, Ensure Clean Water	\$205,343	\$216,350	\$251,987	\$35,637
Clean and Safe Water Technical Assistance Grants				
Water Quality Research and Support Grants	\$0	\$21,700	\$0	-\$21,700
TOTAL EPM	\$2,572,857	\$2,761,550	\$3,796,280	\$1,034,730

Brownfields

Brownfields

Program Area: Brownfields
Goal: Safeguard and Revitalize Communities
and Restore Land for Productive Uses and Healthy Communities

Objective(s): Clean Up and Restore Land for Productive Uses and Healthy Communities

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$22,136	\$24,000	\$36,842	\$12,842
Total Budget Authority	\$22,136	\$24,000	\$36,842	\$12,842
Total Workyears	122.6	127.5	187.5	60.0

Program Project Description:

Brownfields sites are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Brownfields can be found in the heart of America's main streets and former economic centers. The Brownfields Program supports efforts to revitalize these sites by awarding grants and providing technical assistance to states, tribes, local communities, and other stakeholders to work together to plan, inventory, assess, safely cleanup, and reuse brownfields. Approximately 143 million people (roughly 44 percent of the U.S. population) live within three miles of a brownfields site that receives EPA funding. Similarly, within a half mile of a brownfields site receiving EPA funding, 21 percent of people live below the national poverty level, 17 percent have less than a high school education, 56 percent are people of color, and seven percent are linguistically isolated. As of March 2022, grants awarded by the Program have led to over 146,000 acres of idle land made ready for productive use and over 183,000 jobs and over \$35.0 billion leveraged.

The Brownfields Program directly supports the goals of the Administration's Justice40 initiative. Operating activities include: 1) conducting the annual, high volume cooperative agreement competitions; 2) awarding new cooperative agreements; 3) managing the ongoing cooperative agreement workload; 4) providing technical assistance and ongoing support to grantees; 5) providing contractor supported technical assistance to non-grantee communities with brownfields; 6) collaborating with other agency programs; 7) operating the Assessment Cleanup and Redevelopment Exchange System (ACRES) online grantee reporting tool; 8) assisting communities to explore land reuse opportunities under the Land Revitalization Program; and 9) developing guidance and tools that clarify potential environmental cleanup liabilities.

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¹⁷³ U.S. EPA, Office of Land and Emergency Management 2020. Data collected includes: (1) Superfund, Brownfield, and RCRA Corrective Action site information as of the end of FY 2019; (2) UST/LUST information as of late-2018 to mid-2019 depending on the state; and (3) 2015-2018 American Community Survey (ACS) Census data.

¹⁷⁴ From EPA website: https://www.epa.gov/brownfields/brownfields-program-accomplishments-and-benefits#:~:text=Enrolled%20over%2034%2C191%20properties%20annually,3%2C478%2C000%20acres%20ready%20for%20reuse.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.1, Clean Up and Restore Land for Productive Uses and Healthy Communities in the FY 2022 - 2026 EPA Strategic Plan.

Today, there are more than 1,000 active Brownfields cooperative agreements (CAs) and hundreds of land revitalization projects, targeted assessments, financial planning, and visioning sessions taking place. All are supported and invigorated by the Brownfields Program's best tool – community development specialists. Specialists are the backbone of the success of the Agency broadly and they bring unique technical and program management experience, as well as public and environmental health expertise, to individual brownfield communities. The communities the program works with have achieved incredible things, but without the skilled guidance of EPA community development specialists, the Program would not have had the success that characterizes its history at the nexus between environmental revitalization and community development.

To continue to build on these successes, along with the historic investment from the Infrastructure Investment and Jobs Act, the Agency is investing \$11.9 million and an additional 60 FTE in FY 2023. In FY 2021, a detailed Workload Model Analysis identified a significant barrier to engaging with communities related to the availability of on-the-ground resources to conduct outreach and communication. This investment of 60 regional FTE will provide expanded technical assistance and build capacity in small, rural, Environmental Justice (EJ), and other historically disadvantaged communities and support the Program as it implements a responsive, expansive, and innovative environmental and economic community redevelopment program.

In FY 2023, the Brownfields Program will continue to manage approximately 1,000 assessment, cleanup, Revolving Loan Fund (RLF), multi-purpose, and Environmental Workforce Development and Job Training (EWDJT) cooperative agreements, as well as state and tribal assistance agreements; training, research, and technical assistance agreements; Targeted Brownfields Assessments; and land revitalization projects. The Brownfields Program also will continue to foster federal, state, tribal, and public-private partnerships to return properties to productive economic use, including in historically disadvantaged and EJ communities.

In FY 2023, the Brownfields Program will support the following activities:

- Compete and Award New Cooperative Agreements: Review, select, and award an estimated 355 new cooperative agreements, which will lead to approximately \$2.6 billion and 13,480 jobs leveraged in future years.
- Oversight and Management of Existing Cooperative Agreements: Continue federal fiduciary responsibility to manage approximately 1,000 existing brownfields cooperative agreements in a reduced capacity, while ensuring the terms and conditions of the agreements are met and provide limited technical assistance. The Program also will provide targeted environmental oversight support to grantees (e.g., site eligibility determinations, review of environmental site assessment and cleanup reports).

- Technical Assistance: Provide technical assistance to states, tribes, and local communities in the form of research, training, analysis, and support for community led planning workshops. This can lead to cost effective implementation of brownfields redevelopment projects by providing communities with the knowledge necessary to understand market conditions, economic development and other community revitalization strategies, and how cleanup and reuse can be catalyzed by small businesses.
- Collaboration: The Program will work collaboratively with our partners at the state, tribal, and local level on innovative approaches to help achieve land reuse. It also will continue to develop guidance and tools that clarify potential environmental cleanup liabilities, thereby providing greater certainty for parties seeking to reuse these properties. The Program also can provide direct support to facilitate transactions for parties seeking to reuse contaminated properties.
- Accomplishment Tracking: Support the maintenance of the ACRES online grantee reporting tool. This enables grantees to track accomplishments and report on the number of sites assessed and cleaned up, and the amount of dollars and jobs leveraged with brownfields grants.
- Land Revitalization Program Support: Provide support for approximately two communities as part of EPA's Land Revitalization Program. The Land Revitalization Program supports communities in their efforts to restore contaminated lands into sustainable community assets.

Performance Measure Targets:

Work under this program supports performance results in the Brownfields Projects Program under the STAG appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$953.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$11,889.0 / +60.0 FTE) This program change is an increase for community development specialists to manage land revitalization projects, provide one-on-one financial planning support, and educate tribal, rural, and EJ communities on how to address brownfields. This investment includes \$10.261 million in payroll.

Statutory Authority:

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), §§ 101(39), 104(k), 128(a); Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, § 8001.

Clean Air

Clean Air Allowance Trading Programs

Program Area: Clean Air and Climate Goal: Ensure Clean and Healthy Air for All Communities Objective(s): Improve Air Quality and Reduce Localized Pollution and Health Impacts

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$12,920	\$13,153	\$23,523	\$10,370
Science & Technology	\$4,809	\$6,793	\$8,800	\$2,007
Total Budget Authority	\$17,729	\$19,946	\$32,323	\$12,377
Total Workyears	66.2	63.7	82.0	18.3

Program Project Description:

The Clean Air Allowance Trading Programs are nationwide and multi-state programs that address air pollutants that are transported across state, regional, and international boundaries. The programs are designed to control sulfur dioxide (SO₂) and nitrogen oxides (NO_x), key precursors of both fine particulate matter (PM_{2.5}) and ozone (O₃), include Title IV (the Acid Rain Program) of the Clean Air Act, the Cross-State Air Pollution Rule (CSAPR), the CSAPR Update, and the revised CSAPR Update. The infrastructure for the Clean Air Allowance Trading Programs also supports implementation of other state and federal programs to control SO₂, hazardous air pollutants, and greenhouse gases.

The Clean Air Allowance Trading Programs establish a total emission limit across affected emission sources, which must hold allowances as authorizations to emit one ton of the regulated pollutant(s) in a specific emission control period. The owners and operators of affected emission sources may select among different methods of compliance—installing pollution control equipment, switching fuel types, shifting generation to lower-emitting units, purchasing allowances, or other strategies. By offering the flexibility to determine how the sources comply, the programs lower the overall cost, making it feasible to pursue greater emission reductions. These programs are managed through a centralized database system operated by EPA. Data collected under these programs are made available to the public through EPA's Clean Air Markets Data Resources website, the horizontal programs through charts, reports, and downloadable datasets. To implement the Clean Air Allowance Trading Programs, EPA operates an emission measurement and reporting program, market operations program, environmental monitoring programs, and a communication and stakeholder engagement program.

For emissions measurement and reporting, Part 75 requires almost 4,300 affected units to monitor and report emission and operation data.¹⁷⁷ The Part 75 program requires high degrees of accuracy

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¹⁷⁵ Clean Air Act § 403(d).

¹⁷⁶ For additional information, please refer to https://www.epa.gov/airmarkets/data-resources.

¹⁷⁷ Clean Air Act § 412; Clean Air Act Amendments of 1990. P.L. 101-549 § 821.

and reliability from continuous emission monitoring systems or approved alternative methods at the affected sources. EPA provides the affected emission sources with technical assistance to facilitate compliance with the monitoring requirements, and software, the Emissions Collection and Monitoring Plan System (ECMPS), to process, quality assure, and report data to EPA. To assess the quality of the data, the Agency conducts electronic audits, desk reviews, and field audits of the emission data and monitoring systems. In addition to the Clean Air Allowance Trading Programs, the emission measurement program and ECMPS software support several state and federal emission control and reporting programs, including the Texas SO₂ Trading Program, Regional Greenhouse Gas Initiative (RGGI), and Mercury and Air Toxics Standards (MATS). It also interfaces with the Greenhouse Gas Reporting Program (GHGRP), ensuring the Part 75 data is seamlessly transferred to that program's infrastructure (Electronic Greenhouse Gas Reporting Tool (eGGRT)).

EPA's centralized market operation system (the allowance tracking system) manages accounts and records allowance allocations and transfers. At the end of each compliance period, allowances are reconciled against reported emissions to determine compliance for every facility with affected emission sources. For over 20 years, the affected facilities have maintained near-perfect compliance under the trading programs. In 2020, total annual SO₂ emissions from Acid Rain Program-affected emission sources were 788,000 tons, or over 90 percent below the statutory nationwide emissions cap, a level not seen since early in the 20th Century. Total annual 2020 NO_X emissions were 759,000 tons, an almost nine million ton reduction from projected levels, exceeding the Program's goal of a two million ton reduction from projected levels. The allowance tracking system also supports several state and federal emission control and reporting programs, including the Texas SO₂ Trading Program, RGGI, and MATS.

The Clean Air Act's Good Neighbor provision¹⁸¹ requires states or, in some circumstances the Agency, to reduce interstate pollution that significantly contributes to nonattainment or interferes with maintenance of the National Ambient Air Quality Standards (NAAQS). Under this authority, EPA issued CSAPR, which requires 27 states in the eastern U.S. to limit their state-wide emissions of SO₂ and/or NO_x to reduce or eliminate the states' contributions to PM_{2.5} and/or ground-level ozone non-attainment of the NAAQS in downwind states. The emission limitations are defined in terms of maximum statewide "budgets" for emissions of annual SO₂, annual NO_X, and/or ozoneseason NO_X emissions from certain large stationary sources in each state. In 2016, EPA issued the CSAPR Update to address interstate transport of ozone for the 2008 ozone NAAQS in the eastern United States. EPA revised the CSAPR Update on March 15, 2021, to address a ruling of the U.S. Court of Appeals for the D.C. Circuit. In addition, EPA is supporting state efforts to address regional haze including best available retrofit technology and reasonable progress, as well as interstate air pollution transport contributing to downwind nonattainment of NAAOS as those obligations relate to emissions from electricity generating units. 182 EPA is conducting environmental justice analyses of the distribution of these emissions and associated public health impacts on overburdened communities.

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¹⁷⁸ Clean Air Act § 403(d).

¹⁷⁹ For more information, please refer to: http://www3.epa.gov/airmarkets/progress/reports/index.html.

¹⁸⁰ For more information, please refer to: https://www.epa.gov/airmarkets/power-plant-emission-trends.

¹⁸¹ Clean Air Act § 110(a)(2)(D); also refer to Clean Air Act § 110(c).

¹⁸² Clean Air Act § 110 and § 169A; refer to 40 CFR 52.2312.

EPA manages the Clean Air Status and Trends Network (CASTNET), which monitors ambient ozone, sulfate, and nitrate concentrations, dry sulfur and nitrogen deposition, and other air quality indicators. In addition, EPA participates in the National Atmospheric Deposition Program, which monitors wet deposition of sulfur, nitrogen, and mercury, as well as ambient concentrations of mercury and ammonia. EPA also manages the Long-Term Monitoring (LTM) program to assess how lakes, streams, and aquatic ecosystems are responding to reductions in sulfur and nitrogen emissions. Data from these air quality and environmental monitoring programs, in conjunction with SO₂, NO_X, mercury, and CO₂ emissions data from the Part 75 monitoring program and mercury emissions data from the MATS reporting program, have allowed EPA to develop a comprehensive accountability framework to track the results of its air quality programs. EPA applies this framework to the programs it implements and issues annual progress reports on compliance and environmental results achieved by the Acid Rain Program, CSAPR, and the CSAPR Update, and pollution controls installed and emissions reductions achieved by MATS. 183 Required by Congress since FY 2019 in the appropriations reports, these annual progress reports highlight reductions in SO₂ and NO_X emissions, and impacts of these reductions on air quality (e.g., ozone and PM_{2.5} levels), acid deposition, surface water acidity, forest health, and other environmental indicators.

EPA produces several tools to inform the public and key stakeholders about power sector emissions, operations, and environmental data. The Emissions & Generation Resource Integrated Database (eGRID)¹⁸⁴ is a comprehensive source of data on the environmental characteristics of almost all electric power generated in the U.S. Data from eGRID are used by other EPA programs, state energy and air agencies, and researchers. Between 2015 and 2020, eGRID was cited by more than 1,300 academic papers. Power Profiler¹⁸⁵ is a web application where electricity consumers can see the fuel mix and air emissions rates of their region's electricity and determine the air emissions associated with their electricity use. In keeping with the Agency's renewed commitment to energy equity and environmental justice, EPA is developing analytical and mapping tools to better understand and communicate the impact of electricity generation on low-income communities and communities of color. EPA also operates several initiatives to engage key stakeholders, including working closely with tribal governments to build tribal air monitoring capacity through partnerships with the CASTNET Program. The EmPOWER Air Data Challenge 186 encourages academic researchers to propose how to integrate the EPA emissions and/or environmental data in their research. The Ask Clean Air Markets Division (CAMD) webinars provide an opportunity for stakeholders to ask EPA about the Clean Air Allowance Trading Programs, Part 75 emission reporting program, and the emission and environmental data programs.

EPA also develops multiple models and tools to project future emissions from the power sector to inform EPA's air quality modeling, as well as water and land regulations affecting power plants. The Integrated Planning Model (IPM) is a state-of-the-art, peer-reviewed, dynamic linear programming model that EPA develops to project power sector behavior under future business-as-usual conditions and to examine prospective air pollution control policies throughout the

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¹⁸³ To view the progress reports, please refer to: http://www3.epa.gov/airmarkets/progress/reports/index.html.

¹⁸⁴ To view eGRID, please refer to https://www.epa.gov/egrid.

¹⁸⁵ To view Power Profiler, please refer to https://www.epa.gov/egrid/power-profiler.

¹⁸⁶ For more information about the challenge, refer to https://www.epa.gov/airmarkets/empower-air-data-challenge.

contiguous United States for the entire electric power system. EPA uses IPM, along with the National Energy Modeling System (NEMS) and the Regional Energy Deployment System (ReEDS), to estimate future electricity market conditions and associated pollutant emissions scenarios resulting from legislative and regulatory policies under consideration by Congress and the Administration. The National Electric Energy Data System (NEEDS) includes geographic, operating, air emissions, and other data on existing and planned grid-connected electric generating units across the contiguous United States. EPA updates and publishes NEEDS on a quarterly basis to inform emission modeling projections and to provide timely information to air quality planners and policymakers developing regulations to address power sector pollution. EPA is augmenting these power sector models and tools to include important information pertinent to environmental justice analyses and community-level impacts.

EPA implements the American Innovation and Manufacturing (AIM) Act, enacted to address climate damaging HFCs by phasing down HFC production and consumption, maximizing reclamation and minimizing releases of HFCs and their substitutes from equipment, and facilitating the transition to next-generation technologies through sector-based restrictions.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.1, Improve Air Quality and Reduce Localized Pollution and Health Impacts in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA will continue to operate the Clean Air Allowance Trading Programs and the systems to assess compliance with the programs' regulatory requirements and the programs' progress toward the environmental goals required by the Clean Air Act. EPA will work to meet requirements and requests for modeling in support of the power sector and for legal defense of regulatory actions. The Program will continue to support emission reporting for other state and federal programs, including MATS and GHGRP. ¹⁸⁷ In FY 2023, EPA anticipates work on several regulatory actions related to power plants including greenhouse gas emission guidelines for existing power plants (replacing the previously-promulgated Clean Power Plan and the Affordable Clean Energy Rule); interstate ozone transport obligations under the 2015 ozone standard; and continued review of the appropriate and necessary finding and risk and technology review for MATS.

This proposal expands EPA's ability to perform advanced power sector analyses to tackle the climate crisis, including developing environmental justice tools to consider the distributional impacts of emissions on overburdened communities.

Allowance tracking and compliance assessment

EPA will allocate SO₂ and NO_X allowances to affected emission sources and other account holders as established in the Clean Air Act¹⁸⁸ and state and federal CSAPR implementation plans. These allowance holdings and subsequent allowance transfers will be maintained in an allowance

¹⁸⁷ Refer to, 40 C.F.R. Part 63, Subpart UUUUU (National Emission Standards for Hazardous Air Pollutants: Coal and Oil Fired Electric Utility Steam Generating Units) and 40 C.F.R. Part 98, Subpart D (Mandatory Greenhouse Gas Reporting: Electricity Generation).

¹⁸⁸ Clean Air Act §§ 110 and 403.

tracking system (i.e., central database). ¹⁸⁹ EPA will annually reconcile each facility's allowance holdings against its emissions to ensure compliance for all affected sources. ¹⁹⁰

Emission measurement and data collection and review

EPA will operate the Part 75 emission measurement program to collect, verify, and track emissions of air pollutants and air toxics from approximately 4,300 fossil-fuel-fired electric generating units. ¹⁹¹

Program assessment and communication

EPA will continue to monitor ambient air, deposition, and other environmental indicators through the CASTNET and LTM programs, serve as a part of the National Atmospheric Deposition Program, publish the power sector progress reports required by Congress, and produce other information to communicate the extent of the progress made by the Clean Air Allowance Trading Programs. ¹⁹² EPA will publish emissions and environmental data on our Air Markets and eGRID websites.

Redesign system applications

In FY 2023, EPA will need to implement new HFC IT regulatory infrastructure to ensure EPA can fulfill its legal obligations under the AIM Act and leverage the Clean Air Act to advance climate and other air quality goals.

EPA will continue the redesign of its Air Markets Program Data (AMPD) website and Emission Collection Monitoring Plan System (ECMPS) software. These mission critical systems support the trading programs, as well as other emissions reporting programs operated by the states (e.g., RGGI) and EPA (e.g., MATS, GHGRP). Reengineering these decade-old systems will enable EPA to enhance the user experience, comply with EPA security and technology requirements, consolidate software systems, and reduce long-term operation and maintenance costs. The Clean Air Markets Program Data will be released in FY 2022 with the sunset of its predecessor, AMPD. ECMPS will be released in FY 2023.

Assistance to states

EPA will work with states to develop emission reduction programs to comply with the Clean Air Act Good Neighbor Provision and Regional Haze program requirements. 193

Stakeholder engagement

EPA will continue to engage our stakeholder communities through efforts to maintain and strengthen current tribal air monitoring partnerships and build new ones to the extent possible. In addition, EPA has new efforts underway to identify how power plant pollution impacts historically marginalized and underserved communities, and how EPA air rules can mitigate those impacts. EPA also seeks to communicate information about power plant emissions and the contributions to low-income communities and communities of color, and encourage the use of the Clean Air Allowance Trading Programs' data for scientific analysis and communication through various

¹⁹⁰ Clean Air Act §§ 110 and 404-405, and state CSAPR implementation plans.

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¹⁸⁹ Clean Air Act §§ 110 and 403.

¹⁹¹ Clean Air Act § 412; Clean Air Act Amendments of 1990. P.L. 101-549 § 821; and 40 C.F.R. Part 63, Subpart UUUUU.

¹⁹² Government Performance and Results Act § 1115.

¹⁹³ Clean Air Act § 110(a)(2)(D).

programs and tools such as CAMD(ej), EmPOWER Air Data Challenge, and Ask CAMD webinars.

Policy and regulatory development

EPA will contribute multipollutant and multi-media (air, water, land) power sector analyses informing EPA's policy agenda to tackle the climate crisis and protect public health and the environment, including environmental justice analyses to consider the distributional impacts of emissions on overburdened communities. Analytic and policy topics addressing climate change and air pollution that could be analyzed include a wide range of power sector actions under the CAA, as well as analysis of interactions between alternative vehicle electrification futures and associated changes in electric power generation.

Performance Measure Targets:

(PM NOX) Tons of ozone season NOx emissions from electric power	FY 2022	FY 2023
generation sources.	Target	Target
	355,000	344,000

For more information on program performance, please visit: https://www3.epa.gov/airmarkets/progress/reports/.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$703.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$9,667.0 / +18.3 FTE) This program change is an increase in support for emissions trading programs, including associated data systems, that protect human health and the environment by delivering substantial emissions reductions in the power sector of SO₂, NO_x, and hazardous air pollutants. This also supports allowance trading IT infrastructure, including systems related to the implementation of the AIM Act which will reduce HFCs. This proposal expands EPA's ability to perform advanced power sector analyses to tackle the climate crisis, including developing environmental justice tools to consider the distributional impacts of emissions on overburdened communities. This investment includes \$3.176 million in payroll.

Statutory Authority:

Clean Air Act.

Climate Protection

Program Area: Clean Air and Climate
Goal: Tackle the Climate Crisis

Objective(s): Reduce Emissions that Cause Climate Change

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$91,632	\$97,000	\$125,216	\$28,216
Science & Technology	\$7,057	\$7,895	\$10,169	\$2,274
Total Budget Authority	\$98,689	\$104,895	\$135,385	\$30,490
Total Workyears	211.3	214.1	236.9	22.8

Program Project Description:

EPA's Climate Protection Program is working to tackle the climate crisis at home and abroad through an integrated approach of regulations, partnerships, and technical assistance. This Program takes strong action to limit carbon dioxide (CO₂) and methane emissions as well as working to reduce high-global warming potential greenhouse gases (GHG), like hydrofluorocarbons (HFCs), that will help the U.S. realize near-term climate benefits. Through this program, EPA works with federal, state, tribal, local government agencies and key GHG emitting sectors to tackle the climate crisis and deliver environmental and public health benefits for all Americans. EPA builds partnerships, provides tools, and verifies and publishes GHG data, economic modeling, and policy analysis, all of which increase the understanding of climate science, impacts, and protection. EPA also extends this expertise internationally and plays critical roles in shaping and advancing international agreements and solutions. This international collaboration helps to both improve public health and air quality in the United States and level the global playing field for American businesses.

Greenhouse Gas Reporting Program:

EPA implements the U.S. Greenhouse Gas Reporting Program under the Clean Air Act. In 2007, Congress directed EPA to "require mandatory reporting of greenhouse gas emissions above appropriate thresholds in all sectors of the economy of the U.S." EPA annually collects data from over 8,100 facilities from 41 industrial source categories, including suppliers (e.g., producers, importers, and exporters of GHGs) in the U.S. and uses this data to improve estimates included in the *Inventory of U.S. Greenhouse Gas Emissions and Sinks*; support federal and state-level policy and regulatory development; share GHG emissions; and share data with state and local governments, tribes, community groups, industry stakeholders, academia, the research community, and the general public.

Inventory of U.S. Greenhouse Gas Emissions and Sinks:

To fulfill U.S. Treaty obligations, under Article 4 of the 1992 Framework Convention on Climate Change, which was ratified by the U.S. Senate, EPA prepares the annual *Inventory of U.S. Greenhouse Gas Emissions and Sinks*. The *Inventory* provides information on total annual U.S.

emissions and removals by source, economic sector, and GHG. The Inventory is used to inform U.S. policy and for tracking progress towards the U.S. Nationally Determined Contribution under the Paris Agreement. EPA leads the interagency process of preparing the *Inventory*, working with technical experts from numerous federal agencies, including the Department of Energy's Energy Information Administration, Department of Agriculture, Department of Defense, U.S. Geological Survey, and academic and research institutions.

Managing the Transition from Ozone-Depleting Substances:

EPA implements efforts directed by Section 612 of the CAA to ensure a smooth transition away from ozone-depleting substances (ODS) to safer alternatives. Applying a comparative risk assessment, the Significant New Alternatives Policy (SNAP) program evaluates the health and environmental effects of alternatives in the sectors and subsectors where ODS and high-global warming potential HFCs are used, providing additional substitute options in key sectors such as refrigeration and air conditioning.

Phasing Down HFCs:

EPA implements the American Innovation and Manufacturing (AIM) Act, enacted to address climate damaging HFCs by phasing down HFC production and consumption, maximizing reclamation and minimizing releases of HFCs and their substitutes from equipment, and facilitating the transition to next-generation technologies through sector-based restrictions. This phasedown will decrease the production and import of HFCs in the United States by at least 85 percent by 2036, resulting in significant climate benefits.

ENERGY STAR:

ENERGY STAR provides information that consumers and businesses rely on to make informed decisions to reduce energy use, save money, and reduce harmful air pollutants. By reducing energy use, ENERGY STAR lowers costs for states and local governments as they design and implement plans to meet their air quality and climate goals. ENERGY STAR is the national symbol for energy efficiency, recognized by more than 90 percent of American households, and is a critical tool to fight the climate crisis.

ENERGY STAR achieves significant and growing GHG reductions by promoting the adoption of cost-effective, energy-efficient technologies and practices in the residential, commercial, and industrial sectors. The Program yields significant environmental and economic results through its network of thousands of partners. In 2019 alone, ENERGY STAR and its partners helped American families and businesses save nearly 500 billion kilowatt-hours of electricity and avoid \$39 billion in energy costs. These savings resulted in emission reductions of nearly 390 million metric tons of GHGs (roughly equivalent to 5 percent of U.S. total GHG emissions) and more than 470 thousand tons of criteria air pollutants (SO₂, NO_X, PM_{2.5}). This reduction in criteria pollutants is estimated to result in \$7 billion to \$17 billion in public health benefits. ¹⁹⁴ These investments in turn drive job creation across the economy. More than 800,000 Americans are employed in manufacturing or installing ENERGY STAR certified equipment alone – nearly 35 percent of all

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¹⁹⁴ For more information on ENERGY STAR's environmental, human health, and economic impacts, please see here: https://www.energystar.gov/about/origins-mission/impacts. For more information on ENERGY STAR calculation methods, see the Technical Notes, available here: https://cmadmin.energystar.gov/sites/default/files/asset/document/Technical%20Notes.pdf.

energy efficiency jobs in 2019, with energy efficiency accounting for 40 percent of all energy sector jobs overall.¹⁹⁵

EPA manages the ENERGY STAR Program with clearly defined support from the U.S. Department of Energy. Specifically, EPA manages and implements the specification development process for more than 75 product categories and the ENERGY STAR Most Efficient recognition program; the ENERGY STAR Residential New Construction Program for single-family homes, manufactured homes, and multifamily buildings; and the ENERGY STAR commercial and industrial programs. This work includes activities such as certification monitoring and verification, setting performance levels for building types, managing and maintaining the ENERGY STAR Portfolio Manager tool to measure and track energy use in buildings, and managing the integrity of the ENERGY STAR brand.

ENERGY STAR also supports equitable energy solutions that can deliver significant cost savings for low-income families and other overburdened and underserved populations. The Program prioritizes outreach to low-income populations on products that have the greatest opportunity to save energy and dollars. The ENERGY STAR Program also looks for affordable alternatives to products that may be cost-prohibitive, such as replacement windows (e.g., storm windows). In addition, roughly 20 percent of ENERGY STAR home builder partners work in affordable housing, including 550 Habitat for Humanity affiliates (18,000 ENERGY STAR certified homes constructed), 80 manufactured housing plants (more than 66,500 ENERGY STAR certified manufactured homes built), and the multifamily sector (more than 75 percent of ENERGY STAR multifamily high-rise projects are identified as affordable housing). 196

Renewable Energy Programs:

EPA works with industry and other key groups to encourage efficient, clean technologies and promote climate leadership. EPA's Green Power Partnership drives voluntary participation in the U.S. green power market. This program provides information, technical assistance, and recognition to companies that use green power at or above minimum partnership benchmarks. At the end of calendar year 2020, more than 700 EPA Green Power Partners reported the collective use of nearly 70 billion kilowatt-hours of green power annually. This amount of green power use represents nearly 43 percent of the U.S. voluntary green power market (that goes beyond required purchases under state renewable portfolio standards). Since 2001, the Program has helped prevent nearly 280 million metric tons of GHG emissions. ¹⁹⁷ In addition, EPA's Green Power Partnership also recognizes more than 100 EPA Green Power Communities nationwide that advance green power access and use to their community members. The Combined Heat and Power Partnership offers tools and services to facilitate and promote cost-effective, highly efficient Combined Heat and Power (CHP) projects. The Center for Corporate Climate Leadership establishes norms of climate leadership by encouraging organizations with emerging climate objectives to identify and

¹⁹⁵ NASEO and Energy Futures Initiative. (2020). U.S. Energy and Employment Report. https://www.usenergyjobs.org/ (link is external). The survey does not account for retail employment.

¹⁹⁶ For more information on ENERGY STAR's environmental, human health, and economic impacts, please see here: https://www.energystar.gov/about/origins_mission/impacts. For more information on ENERGY STAR calculation methods, see the Technical Notes, available here: https://cmadmin.energystar.gov/sites/default/files/asset/document/Technical%20Notes.pdf.
¹⁹⁷ For more information on EPA's Green Power Partnership's environmental, human health, and economic impacts, please see here: https://www.epa.gov/greenpower/green-power-partnership-program-success-metrics.

achieve cost-effective GHG emission reductions, while helping more advanced organizations drive innovations in reducing their greenhouse gas impacts in their supply chains and beyond.

State, Tribal and Local Climate and Energy Programs:

EPA works with state, tribal and local governments to identify and implement cost-effective programs that reduce GHG emissions, save energy, improve air quality, and mitigate heat island effects. EPA provides tools, data, and technical expertise to help subnational governments implement clean energy policies and programs that reduce emissions, maximize co-benefits, and prioritize low-income communities and communities with environmental justice concerns. The Programs help governments develop emissions inventories, discover best practices for emissions reductions and heat island mitigation, and analyze the emissions and health benefits of clean energy strategies. These programs also highlight the best examples across the country on how to deliver inclusive climate programs and provide resources to help governments deliver energy efficiency and renewable energy to low-income communities.

SmartWay Transport:

Launched in 2004, SmartWay is the only voluntary program working across the entire freight system to comprehensively address economic and environmental goals related to sustainability. Nearly 4,000 businesses that receive, ship, or carry freight rely upon SmartWay supply chain accounting tools and methods to assess, track, and reduce transportation-related carbon, energy use, and air emissions. By accelerating deployment of cleaner, more efficient technologies and operational strategies across supply chains, SmartWay partners have avoided significant amounts of pollution, helping to address the climate crisis and contributing to healthier air for underserved and overburdened communities living close to freight hubs and routes. Improving supply chain efficiency also helps grow the economy and protect and create jobs while contributing to energy security.

EPA is the SmartWay brand manager and is responsible for the specification process for hundreds of product and vehicle categories, including both family (passenger) vehicles and commercial (heavy-duty freight truck and trailer) vehicles, and the SmartWay Partnership and SmartWay Affiliate recognition programs. EPA's technology verification program enables manufacturers to voluntarily demonstrate fuel saving and emission reduction performance using standard testing protocols. SmartWay partner fleets as well as others in the trucking industry use EPA's verified technology lists to identify products that have been demonstrated to save fuel and reduce emissions.

Partnerships to Reduce Methane Emissions:

EPA operates several partnership programs that promote cost-effective reductions of methane by working collaboratively with industry. Methane programs offer excellent opportunities for reducing the concentration of GHGs in the atmosphere and providing an energy resource in the process. Methane is a significant source of GHG emissions and has a relatively short atmospheric lifetime of about 9 to 15 years, which means that reductions made today will yield positive results in the near term. Unlike other GHGs, methane is an important energy resource that allows for cost-effective mitigation. There are many opportunities to recover and re-use or sell methane from the agriculture (manure management), coal mining, oil and gas, and landfill sectors. The AgSTAR program, which is a collaboration between EPA and the Department of Agriculture, focuses on

methane emission reductions from livestock waste management operations through biogas recovery systems. The Coalbed Methane Outreach Program promotes opportunities to profitably recover and use methane emitted from coal mining activities. The Landfill Methane Outreach Program promotes abatement and energy recovery of methane emitted from landfills. The Natural Gas STAR and Methane Challenge programs spur the adoption of cost-effective technologies and practices that reduce methane emissions from the oil and natural gas sector through collaborative partnerships with companies.

EPA also manages the implementation of the Global Methane Initiative (GMI), a U.S. led international public-private partnership that brings together over 45 partner governments and over 700 private sector and non-governmental organizations to advance methane recovery and use. GMI builds on the success of EPA's domestic methane programs and focuses on advancing methane reductions from agriculture, coal mines, landfills, oil and gas systems, and municipal wastewater. With assistance from several agencies—particularly EPA and U.S. State Department—the U.S. Government has supported identification and implementation of more than 1,100 methane mitigation projects since 2005. These projects have reduced methane emissions by about 500 million tons of carbon dioxide equivalent (MMTCO2e), including approximately 42 MMTCO2e in 2020. Since 2005, U.S. efforts under the auspices of GMI leveraged more than \$650 million for project implementation and training and provided trainings for more than 50,000 people in methane mitigation. ¹⁹⁸

Partnerships to Reduce Fluorinated Greenhouse Gas Emissions:

EPA operates partnership programs that promote cost-effective reductions of fluorinated greenhouse gases (FGHG) by working collaboratively with industry. EPA's FGHG partnership programs continue to make significant reductions in potent GHG emissions, such as perfluorocarbons, HFCs, nitrogen trifluoride, and sulfur hexafluoride. Through its partnership programs, EPA works closely with participating industries to identify cost-effective emissions reduction opportunities, recognize industry accomplishments, and facilitate the transition toward environmentally friendlier technologies and chemicals and best environmental practices. Although FGHGs account for a small portion of total U.S. GHG emissions, they have very high global warming potentials.

Science, Economic, and Technical Analyses:

EPA conducts a range of economic, scientific, and technical analyses for CAA regulatory actions and to support the Administration's efforts to address climate change. These efforts include the communication of the science of climate change to the public by providing information on the indicators of climate change, climate risks, and actions that can be taken to mitigate the impacts. EPA applies an analytical framework to evaluate avoided risk and economic impacts of GHG mitigation. These efforts also include the development of multiple models and tools to project future multipollutant emissions (including GHGs) from the power sector to inform EPA's air quality modeling and air, water, and land regulations affecting power plants. EPA applies modeling tools and expertise across a wide range of high priority work areas, including supporting U.S. participation in the Paris Agreement, providing analysis and technical expertise to the U.S. Special Presidential Envoy for Climate and other interagency partners to support U.S. engagement

¹⁹⁸For more information on the Global Methane Initiative's environmental, human health, and economic impacts, please see here: https://www.epa.gov/gmi/us-government-global-methane-initiative-accomplishments.

with foreign governments on climate change, and conducting legislative analyses as requested by Congressional staff. Furthermore, EPA provides critical, world-renowned non-CO₂, agriculture, and forestry analyses and participates in the interagency process to improve and apply the models and analyses as needed. Finally, EPA is expanding its ability to conduct equity and environmental justice analyses to identify policy implications and improve collaboration with underserved and frontline communities.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Reduce Emissions that Cause Climate Change in the FY 2022 - 2026 EPA Strategic Plan. Work in this program also directly supports progress toward the Agency Priority Goal: Phase down the production and consumption of hydrofluorocarbons (HFCs). By September 30, 2023, annual U.S. consumption of HFCs will be 10 percent below the baseline of 303.9 million metric tons of carbon dioxide equivalent (MMTCO₂e) consistent with the HFC phasedown schedule in the American Innovation and Manufacturing (AIM) Act and codified in the implementing regulations. A 10 percent reduction would decrease the U.S. consumption limit to less than 273.5 MMTCO₂e in 2023.

In FY 2023, EPA is requesting \$21.4 million and 20.5 FTE in additional resources to help reduce greenhouse gas emissions while also addressing environmental justice through an integrated approach of regulations, partnerships, and technical assistance. The increase enables EPA to take strong action on CO2 and methane as well as high-global warming potential climate pollutants such as HFCs; restores the capacity of EPA's climate partnership programs to provide essential contributions to our nation's climate, economic, and justice goals; and strengthens EPA's capacity to apply its modeling tools and expertise across a wide range of high priority work areas including supporting U.S. participation in the Paris Agreement.

In FY 2023, EPA will continue to implement the Greenhouse Gas Reporting Program covering a total of 41 sectors, with approximately 8,100 reporters. In FY 2023, EPA will verify 98 percent of Annual Greenhouse Gas Reports from these sectors. Focus areas for the Program will include:

- Completing a pending rulemaking to update, streamline, and enhance the scope and accuracy of the GHG Reporting Program across multiple sectors, including oil and gas as well as carbon capture projects;
- Aligning the electronic GHG reporting tool with those regulatory amendments;
- Ensuring that the electronic reporting system continues to meet all Agency security requirements;

¹⁹⁹ EPA's final rule, "Phasedown of Hydrofluorocarbons: Establishing the Allowance Allocation and Trading Program under the AIM Act" establishes the HFC production and consumption baselines from which the phasedown steps are measured. Using the equation provided in the AIM Act and based on the data available to the Agency through the Greenhouse Gas Reporting Program (GHGRP) and outreach conducted for this rulemaking, EPA determined that the production baseline is 382.6 million metric tons of exchange value equivalent (MMTEVe) and the consumption baseline is 303.9 MMTEVe. EPA has determined that the exchange values included in subsection (c) of the AIM Act are identical to the GWPs included in IPCC (2007). Therefore, one million metric tons of carbon dioxide equivalent (MMTCO₂e) is numerically equivalent to one MMTEVe. EPA is using the measurement MMTCO₂e in this document since the public is more familiar with this term than MMTEVe.

- Ongoing system enhancements to the GHG Reporting Program's electronic GHG reporting tool (eGGRT) to accommodate HFC supply data submitted by industry to meet the reporting requirements of the AIM Act regulations;
- Conducting a QA/QC and verification process through a combination of electronic checks, staff reviews, and follow-up with facilities when necessary;
- Publishing reported data while enhancing the Facility Level Information on GHG Tool (FLIGHT) mapping feature to visually display the distribution of GHG emissions and sources of GHG supply in areas of the country of environmental justice and equity concern; and
- Continued review and approval of the increased number of Carbon Capture and Storage Monitoring Reporting and Verification plans that are submitted to the GHG Reporting Program due to changes in the IRS 45Q tax code.

In addition, EPA will work to complete the annual *Inventory of U.S. Greenhouse Emissions and Sinks*. Focus areas will include:

- Continuing improvements to inventory methodologies in areas such as oil and gas, landuse, and waste, consistent with Intergovernmental Panel on Climate Change guidelines, and to meet upcoming Paris reporting requirements;
- Disaggregating the national *Inventory of U.S. Greenhouse Gas Emissions and Sinks* to the state level and publishing the results annually through the online Data Explorer tool;
- Furthering work to make use of advanced observation technologies, including through developing the capacity to publish an annual gridded methane inventory, which is essential for use by atmospheric researchers and as input to other studies;
- Creating a new GHG emission calculator, linked to Portfolio Manager, to develop building GHG inventories that fully comply with accounting protocols and local mandates; and
- Enhancing GHG inventory tools and technical assistance to states, local governments, and tribes.

In FY 2023, EPA will continue to implement the ENERGY STAR Program, partnering with more than 840 utilities (representing an annual collective investment of \$8.4 billion in energy efficiency programs) from state and local governments, plus nonprofits. These partners leverage ENERGY STAR in their efficiency programs to achieve GHG reductions in major economic sectors, consistent with national commitments.

ENERGY STAR will work in the Residential Sector to enable and accelerate the adoption of energy efficiency. In FY 2023, the Program will:

- Update up to five product specifications for ENERGY STAR-labeled products to ensure top efficiency performance;
- Further amend up to three ENERGY STAR specifications in response to changes in Department of Energy (DOE) minimum efficiency standards and test procedures;
- Maintain third-party certification to ensure consumer confidence in more than 75 categories for ENERGY STAR labeled products, which includes overseeing 500 recognized laboratories worldwide and 20 certification bodies;
- Further drive long-term climate goals by advancing the cutting edge of the current and

future market through the ENERGY STAR Emerging Technology Awards and the ENERGY STAR Most Efficient recognition program, which certifies 3,600 product models from over 280 manufacturers;

- Leverage the market power of the ENERGY STAR brand through the ENERGY STAR Home Upgrade to quickly scale home energy retrofits featuring the high impact, broadly applicable measures (e.g., heat pumps and heat pump water heaters) that are critical to efficiently decarbonizing the residential sector;
- Target energy-saving resources to underserved and energy burdened households with expanded efforts to leverage the ENERGY STAR market power to advance utility-scale uptake of equitable financing approaches for home energy upgrades, a key opportunity to support environmental justice goals;
- Implement critical program requirement updates for EPA's ENERGY STAR Residential New Construction programs, including development of a substantially revised program specification for manufactured homes in response to new code requirements for this sector to ensure at least 10 percent energy savings compared to the new code; and
- Develop and deploy a new ENERGY STAR-based whole-house certification program to recognize the next generation of new homes and apartments that incorporate advanced

efficient electric technologies such as heat pumps, heat pump water heaters, induction cooking, and electric vehicle charging capability.

In addition, ENERGY STAR will continue to partner with businesses and public-sector organizations to advance energy efficiency in the commercial sector. In FY 2023, the Program will:

- Continue to operate and maintain ENERGY STAR Portfolio Manager, as well as deliver critical enhancements to accommodate the more than 300 commercial software vendors and utilities that use the tool, and add reporting and tracking functionality and enhanced data quality checks to increase support to corporate and federal, state and local government users;
- Update and expand ENERGY STAR building scores, used to understand how a building's energy consumption compares with similar buildings nationwide;
- Verify the efficiency of more than 6,000 buildings with EPA's ENERGY STAR label, including conducting approximately 250 spot audits;
- Provide guidance and technical assistance to the roughly 50 local governments and states that have adopted mandatory or voluntary energy benchmarking and disclosure policies and/or building performance standards that require use of EPA's ENERGY STAR Portfolio Manager; and
- Produce a public dataset and data visualization tools from Portfolio Manager to understand
 the range of energy use and intensity across multiple building types and geographic
 locations.

ENERGY STAR will continue to work with partners in the industrial sector to improve efficiency and reduce costs while protecting the environment. In FY 2023, the Program will:

- Continue to support ENERGY STAR industrial partners across 33 diverse industrial sectors through webinars, focus industry meetings, company-to-company mentoring, and recognition of efficient plants;
- Update and develop new Energy Performance Indicators to incorporate key factors that impact energy use in the plant and converts electricity inputs to source energy; and
- Work with, review, and audit an expected 200 industrial plants applications registered to achieve the ENERGY STAR Challenge for Industry in which industrial sites commit to reducing their energy intensity by 10 percent within five years.

In FY 2023, EPA will implement the Green Power Partnership and accelerate the transition to a carbon-pollution free electricity sector. In FY 2023, the Program will:

- Update and develop new credible resources, educational tools, and recognition of actions and leadership to incentivize all sectors of Green Power Partners;
- Drive market leadership and impact by recognizing the actions of partnering organizations that significantly advance the development of green power markets and renewable energy development; and
- Partner with over 120 Green Power Communities to encourage local efforts to increase their use of and investment in renewable electricity, including underserved communities that have traditionally lacked adequate access to green power.

In FY 2023, EPA will implement other partnerships to achieve GHG reductions in major economic sectors, consistent with national climate commitments. Focus areas of the programs will include:

- Implementing the Center for Corporate Climate Leadership program, promoting costeffective corporate GHG management practices that support the measurement and management of corporate-wide emissions; and
- Developing and enhancing guidance and tools to assist public companies with GHG emission reductions and climate disclosure of GHG emissions in their operations and supply chains.
- Operating the CHP Partnership, promoting efficient and environmentally beneficial CHP;

In FY 2023, EPA will implement the State, Tribal and Local Climate and Energy Program to support state and local activity that is essential to tackling the climate crisis and promoting equity and environmental justice in clean energy programs. Focus areas of the Program will include:

- Providing technical support to dozens of state, tribal and local governments as they implement climate and clean energy policies for efficiency, renewables, and beneficial electrification; provide increased support on equity and environmental justice in clean energy policy design;
- Updating major analytical tools to enable state, tribal and local governments to develop and analyze GHG inventories, pollutant emissions reductions, and public health co-benefits of efficiency and renewables; expand focus of tools to analyze beneficial electrification;
- Conducting significant outreach and training on tools with a focus on new tools such as the Energy Savings and Impacts Scenario Tool, which helps users assess a set of long-term

- environmental, health, economic and equity impacts from utility energy efficiency programs;
- Launching updates to EPA's State Guide to Action on Clean Energy by hosting webinars and convenings or workshops for state policymakers; and
- Helping local governments implement heat island reduction initiatives that are a priority of communities with environmental justice concerns by promoting best practices, updating technical resources, and convening stakeholders.

In FY 2023, EPA will continue to achieve significant reductions in climate and other harmful emissions from freight transportation by expanding SmartWay efforts to:

- Develop and refine GHG accounting protocols for freight carriers and their customers;
- Continue to provide expertise and serve as a technical test bed in support of the Agency's efforts to reduce GHG emissions;
- Transition SmartWay partner tools to an online platform making it easier to benchmark and track performance and expanding access to SmartWay for smaller businesses;
- Encourage adoption of SmartWay approaches globally under international frameworks and agreements, including co-administering SmartWay with Canada and continue a SmartWay pilot in Mexico;
- Contribute to development and dissemination of an International Organization for Standardization (ISO) standard to calculate GHG from transportation operations; and,
- Update GHG requirements for federal purchases of passenger vehicles under the Energy Independence and Security Act as needed.

In FY 2023, EPA will continue to mitigate domestic methane and fluorinated greenhouse gases emissions by implementing partnership outreach programs focused on providing technical information on best practices and cost-effective technologies in the petroleum and natural gas systems, municipal solid waste landfills, livestock manure anaerobic digestion and biogas systems, coal mining, and electric power transmission sectors. EPA's GreenChill Advanced Refrigeration Partnership Program will continue to work with food retail partners transitioning from ozone-depleting substances and HFCs to promoting lower global warming potential and improved more energy-efficient technologies. The Responsible Appliance Disposal Program partners achieve emissions reductions by collecting and disposing of refrigerant-containing appliances.

EPA also will continue implementing and promoting global methane mitigation opportunities across multiple sectors (oil and gas, coal mining, municipal solid waste, wastewater, agriculture/manure management) in support of the GMI by:

- Running the secretariat of the GMI, coordinating and organizing overall activities;
- Providing technical leadership across multiple sectors;
- Coordinating with key methane-focused initiatives such as United Nations Economic Commission for Europe, Climate & Clean Air Coalition, and the International Energy Agency; and
- Serving Administration-level priorities, such as the Global Methane Pledge.

In FY 2023, EPA will maintain and enhance the climate change website by updating scientific material and further developing web products that reach the American public and effectively communicate the causes and effects of climate change and Administration priorities.

EPA also will support the State Department as the technical lead in developing both current and additional measure projections, and compiling information on GHG mitigation policies and measures to assess our progress towards meeting our Nationally Determined Contribution goal. These actions are part of the upcoming U.S. Biennial Report, as required by the U.N. Framework Convention on Climate Change. EPA also will prepare for the transition to the Paris Agreement requirements and submit new Biennial Transparency Reports in calendar year 2024.

EPA will continue our United Nations Framework Convention on Climate Change engagement by serving as negotiators on U.S. delegations, for example, on transparency and markets, and working to assess mitigation potential and information from other countries. EPA also will review national inventory and related reports submitted by other countries, including other major economies such as Brazil, Germany, and China.

EPA will continue to improve work on climate change impacts modeling including how risks and economic impacts can be reduced under mitigation and adaptation scenarios by:

- Advancing the scientific literature on climate impacts through the Climate Change Impacts and Risk Analysis project by publishing sectoral impact methodologies and reduced form approaches to improve analytical and communication capacity;
- Quantifying and monetizing the disproportionate risks of climate change on socially vulnerable populations;
- Continuing to make the Climate Change Indicators more accessible through enhanced visualization tools; and
- Collaborating with the interagency U.S. Global Change Research Program through participation in the National Climate Assessment and other key Program activities.

EPA also will analyze program data on GHG emissions from petroleum and natural gas facilities and support Agency regulatory development by:

- Developing more detailed oil and gas projections to support the nationally determined contributions under the Paris Agreement; and
- Performing technical analyses, regulatory development, regulatory impact analyses, and litigation support.

In FY 2022, through significant contributions to the Interagency Work Group, EPA is expected to complete work to finalize the Social Cost of Greenhouse Gases (SC-GHG) and recommend a process for reviewing and updating SC-GHG as required under Executive Order 13990: Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis. The final values are key to quantifying the benefits of actions across the federal government and beyond to address climate change. In FY 2023, we will engage in research in response to the IWG

recommendations for an ongoing updating process for the SC-GHG to ensure that they continue to reflect the latest science. ²⁰⁰

Performance Measure Targets:

(PM REP) Percentage of Annual Greenhouse Gas Emission Reports verified by EPA before publication.	FY 2022 Target	FY 2023 Target
	98	98
(PM CPP) Million metric tons of carbon dioxide equivalent reduced annually by EPA's climate partnership programs.	FY 2022 Target	FY 2023 Target
1 11 5	486.9	500.7
		T
(PM HFC) Remaining U.S. consumption of hydrofluorocarbons (HFCs).	FY 2022	FY 2023
	Target	Target
	273.5	273.5

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$1,791.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$21,425.0 / +20.5 FTE) This program change is an increase for programs under this program project that help reduce greenhouse gas emissions while also addressing environmental justice through an integrated approach of regulations, partnerships, and technical assistance. The increase enables EPA to take strong action on CO₂ and methane as well as high-global warming potential climate pollutants, such as HFCs, as directed by the AIM Act; restores the capacity of EPA's climate partnership programs to provide essential contributions to our nation's climate, economic, and justice goals; and strengthens EPA's capacity to apply its modeling tools and expertise across a wide range of high priority work areas including supporting U.S. participation in the Paris Agreement. This investment includes \$3.692 million in payroll.
- (+\$5,000.0) This program change is an increase for EPA to work closely with NASA on prototyping capabilities for a greenhouse gas monitoring and information system that will integrate data from a variety of sources with a goal of making data more accessible and usable to federal, state, and local governments, researchers, the public, and other users.

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²⁰⁰ On March 16, 2022, the Fifth Circuit Court of Appeals stayed an injunction issued by the U.S. District Court for the Western District of Louisiana related to the social cost of carbon metric.

Statutory Authority:

Clean Air Act; Global Change Research Act of 1990; Global Climate Protections Act; Energy Policy Act of 2005 § 756; Pollution Prevention Act §§ 6602-6605; National Environmental Policy Act (NEPA) § 102; Clean Water Act § 104; Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) § 8001; American Innovation and Manufacturing (AIM) Act.

Federal Stationary Source Regulations

Program Area: Clean Air and Climate Goal: Ensure Clean and Healthy Air for All Communities Objective(s): Improve Air Quality and Reduce Localized Pollution and Health Impacts

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$19,317	\$20,733	\$41,617	\$20,884
Total Budget Authority	\$19,317	\$20,733	\$41,617	\$20,884
Total Workyears	107.4	108.5	149.5	41.0

Program Project Description:

The Clean Air Act (CAA) requires EPA to take action to improve and protect air quality and limit emissions of harmful air pollutants from a variety of sources. The CAA directs EPA to set National Ambient Air Quality Standards (NAAQS) for six "criteria" pollutants considered harmful to public health and the environment. The NAAQS pollutants are particulate matter (PM), ozone (O₃), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO), and lead (Pb). The CAA requires EPA to review the science upon which the NAAQS are based and the standards themselves every five years. These national standards form the foundation for air quality management and establish goals that protect public health and the environment. Section 109 of the CAA Amendments of 1990 established two types of NAAQS. Primary standards are set at a level requisite to protect public health with an adequate margin of safety. Secondary standards are set at a level requisite to protect public welfare from any known or anticipated adverse effects.

Sections 111, 112, and 129 of the CAA direct EPA to take actions to control air emissions of toxic, criteria, and other pollutants from stationary sources. Specifically, to address air toxics, the CAA Section 112 Program provides for the development of National Emission Standards for Hazardous Air Pollutants (NESHAP) for major sources and area sources; the assessment and, as necessary, regulation of risks remaining after implementation of NESHAP that are based on Maximum Available Control Technology (MACT); the periodic review and revision of the NESHAP to reflect developments in practices, processes, and control technologies; and associated national guidance and outreach. In addition, EPA must periodically review, and, where appropriate, revise both the list of air toxics subject to regulation and the list of source categories for which standards must be developed.

The CAA Section 111 program requires issuing, reviewing, and periodically revising, as necessary, New Source Performance Standards (NSPS) for certain pollutants from listed categories of new, modified, or reconstructed sources of air emissions; issuing emissions guidelines for states to apply to certain existing sources; and providing guidance on Reasonably Available Control Technology through issuance and periodic review and revision of control technique guidelines. The CAA Section 129 program further requires EPA to develop and periodically review standards of performance and emissions guidelines covering air emissions from waste combustion sources.

Sections 169A and 169B of the CAA require protection of air quality related values (AQRV) for 156 congressionally mandated national parks and wilderness areas, known as Class I areas. Visibility is one such AQRV, and Congress established a national goal of returning visibility in the Class I areas to natural conditions, i.e., the visibility conditions which existed without manmade air pollution. The Regional Haze Rule sets forth the requirements that state plans must satisfy to make reasonable progress towards meeting this national goal.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.1, Improve Air Quality and Reduce Localized Pollution and Health Impacts in the FY 2022 - 2026 EPA Strategic Plan.

NAAOS

The President directed EPA to review the 2020 PM NAAQS and the 2020 Ozone NAAQS in accordance with Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*. EPA has requested resources in FY 2023 to better incorporate science and input from the reestablished Clean Air Scientific Advisory Committee and to assess information received during the public process for rulemakings to complete these reviews. In FY 2023, EPA will continue reviewing the NAAQS and make revisions, as appropriate, and has requested resources commensurate to support these reviews. Each review involves a comprehensive reexamination, synthesis, and evaluation of scientific information, the design and conduct of complex air quality and risk and exposure analyses, and the development of a comprehensive policy assessment providing analysis of the scientific basis for alternative policy options.

In FY 2023, EPA will initiate a multi-phased process for improving air pollution benefits analysis methods to improve the science it uses to quantify benefits from air quality regulations. This is one of the learning priority areas as part of the Agency's Learning Agenda in the *FY 2022-2026 EPA Strategic Plan*. EPA will develop a draft benefits *Guidelines* document outlining best practices for incorporating new scientific information into methods for benefits analysis. This will be followed by additional reviews of specific methods and applications. This effort will help ensure transparency and confidence in the process for selecting and applying the latest science in benefits analysis. EPA also will improve tools and approaches to enable more robust analysis of program impacts on communities with environmental justice concerns and vulnerable populations. EPA will work to achieve and maintain compliance with existing standards. These include the ozone standards established in 2015, 2008, 1997, and 1979; the 1987 PM₁₀ standards; the 2012, 2006, and 1997 PM_{2.5} standards; the 2008 and 1978 lead standards;²⁰¹ the 2010 NO₂ standard;²⁰² the 1971 CO standard; and the 2010 SO₂ standard.²⁰³ EPA, in close collaboration with states and tribes, will work to improve air quality in areas not in attainment with the NAAQS, including assisting states and tribes in developing CAA-compliant pollution reduction plans.

²⁰¹ In September 2016, EPA completed the review of the 2008 Lead NAAQS and retained the standards without revision. ²⁰² In April 2018, EPA completed the review of the 2010 NO₂ NAAQS and retained the standards without revision.

²⁰³ In February 2019, EPA completed the review of the 2010 SO₂ NAAQS and retained the standards without revision.

Air Toxics

Section 112(d)(6) of the CAA requires EPA to review and revise, as necessary, all NESHAP (for both major and area sources) every eight years. These reviews include compiling information and data already available to the Agency; collecting new information and emissions data from industry; reviewing emission control technologies; and conducting economic analyses for the affected industries needed for developing regulations. Similarly, Section 112(f) of the CAA requires EPA to review the risk that remains after the implementation of MACT standards within eight years of promulgation. In addition, Section 112 requires EPA to periodically review, and, where appropriate, revise both the list of air toxics subject to regulation and the list of source categories for which standards must be developed. The CAA Section 129 Program further requires EPA to develop and periodically review standards of performance and emissions guidelines covering air emissions from waste combustion sources.

In FY 2023, EPA will undertake multiple CAA reviews and associated rulemakings. The air toxics program will prioritize conducting reviews of NESHAP for more than 32 source categories, many of which are subject to court-ordered or court-entered dates or are actions otherwise required by courts, as well as ethylene oxide source categories such as commercial sterilizers and chemical sectors. EPA also expects to undertake actions related to reviewing and revising the list of hazardous air pollutants, as Section 112 requires. EPA expects to propose or promulgate more than 20 rules in FY 2023. In meeting the requirements of Executive Order 13990, EPA also will continue review of the Mercury and Air Toxics Standards for power plants, including the appropriate and necessary finding and risk and technology review, and will take appropriate action resulting from that review in FY 2023. EPA will enhance risk assessment capabilities to better identify and determine impacts of exposures to air toxics on communities. The Program will prioritize its work, as resources allow, with an emphasis on meeting court-ordered deadlines, and also incorporate environmental justice considerations as part of the decision-making process.

As called for in the Administrator's April 27, 2021, *Memorandum Regarding Per- and Polyfluoroalkyl Substances*, ²⁰⁴ EPA will take actions to address PFAS pollution. The Agency's new EPA Council on PFAS will collaborate on cross-cutting strategies; advance new science; develop coordinated policies, regulations, and communications; and engage with affected states, tribes, communities, and stakeholders. This includes consideration of appropriate actions using existing CAA authorities.

As part of a forward-looking air toxics strategy, EPA will address these regulatory and emerging issues, and improve access to air toxics data. The Agency will transition to an approach to share air toxics data faster and more regularly to the public, allowing for increased transparency and the ability to see trends and risks over time. By 2023, EPA will report the most current air toxics data each year in the annual Air Trends Report and an online interactive tool instead of the current three - to four - year cycle and provide that data at increased spatial resolution.

NSPS

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Section 111 of the CAA requires EPA to set NSPS for new, modified, or reconstructed stationary sources of air emissions in categories that have been determined to cause, or significantly

²⁰⁴ https://www.epa.gov/sites/default/files/2021-04/documents/per-and_polyfluoroalkyl_substances.memo_.signed.pdf.

contribute to, air pollution that may endanger public health or welfare. Section 111 also requires EPA, at least every eight years, to review and, if appropriate, revise NSPS for each source category for which such standards have been established. Under CAA Section 111, EPA must establish emission guidelines for existing sources for which air quality criteria have not been issued, are not included in the list published under Section 108(a) or are emitted from a source category that is regulated under Section 112, but to which a standard of performance would apply if such an existing source were a new source.

In meeting the requirements of Executive Order 13990 and as part of the Administration's comprehensive approach to tackling the climate crisis, EPA also will issue rules to reduce CO₂ and methane from power plants and oil and gas facilities under Section 111. In FY 2023, EPA expects to finalize actions for the oil and gas sector that were proposed in FY 2022. The oil and natural gas industry is the largest industrial source of U.S. emissions of methane and its facilities and operations also emit smog-forming volatile organic compounds and toxic air pollutants such as benzene. Executive Order 13990 also directs EPA to revise and address as appropriate the regulation of GHGs from fossil-fuel fired power plants. Electricity production generates the second largest share of GHG emissions. EPA will carefully craft an equitable approach informed by engagement with communities and a fresh look at pertinent policies, technology, and data. EPA plans to propose emission guidelines and review new source performance standards under Section 111 in FY 2023. These actions are key steps toward EPA's commitment to deliver public health protections from these pollutants for communities across America.

In FY 2023, EPA will work to fulfill the CAA's Section 111 requirements for approximately fifteen source categories in 18 rulemaking actions, all of which are subject to court or executive orders or are in litigation.

In addition, under Section 129 of the CAA, in FY 2023 EPA plans to propose at least one rule regarding incineration and control technologies that supports other rules issued under Section 129.

EPA also will undertake other projects, such as those required by statute or executive order, such as overdue NSPS and area source technology reviews related to source categories in addition to those described above. EPA will continue work on case-by-case regional and national NESHAP and NSPS applicability determinations.

Performance Measure Targets:

(PM NAAQS) Percentage of air quality improvement in counties not meeting current NAAQS.	FY 2022 Target	FY 2023 Target
	7	8
(PM NAAQS2) Percentage of people with low SES living in areas where the	FY 2022	FY 2023
air quality meets the PM _{2.5} NAAQS.	Target	Target
	90	93

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$1,708.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefit costs.
- (+\$16,412.0 / +39.0 FTE) This program change is an increase to support the regulation of stationary sources of air pollution through developing and implementing emissions standards, regulations, and guidelines. This investment includes \$6.974 million in payroll.
- (+\$2,764.0 / +2.0 FTE) This program change is an increase in support implementation of the Foundations for Evidence-Based Policymaking Act of 2018, to help the Agency identify, prioritize, and undertake evidence-building activities and develop evidence-building capacity to inform policy and decisions. This investment includes \$358.0 thousand in payroll.

Statutory Authority:

Clean Air Act.

Federal Support for Air Quality Management

Program Area: Clean Air and Climate Goal: Ensure Clean and Healthy Air for All Communities Objective(s): Improve Air Quality and Reduce Localized Pollution and Health Impacts

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$131,015	\$138,020	\$289,010	\$150,990
Science & Technology	\$8,661	\$7,154	\$10,420	\$3,266
Total Budget Authority	\$139,676	\$145,174	\$299,430	\$154,256
Total Workyears	832.7	843.0	945.4	102.4

Program Project Description:

The Federal Support for Air Quality Management Program assists states, tribes, and local air pollution control agencies in the development, implementation, and evaluation of programs for the National Ambient Air Quality Standards (NAAQS); establishes standards for reducing air toxics; and helps reduce haze and improve visibility in some of America's largest national parks and wilderness areas. EPA develops federal measures and regional strategies that help to reduce emissions from stationary and mobile sources; delegated states have the primary responsibility (and tribes may choose to take responsibility) for developing clean air measures necessary to meet the NAAQS and protect visibility. At the core of this program is the use of scientific and technical air quality and emissions data. EPA, working with states, tribes, and local air agencies, develops methods for estimating and measuring air emissions and monitoring air quality concentrations, collects these data, and maintains databases (e.g., Emissions Inventory System, Air Quality System, etc.). EPA also supports training for state, tribal, and local air pollution professionals.

NAAOS Development

The Clean Air Act (CAA) requires EPA to set the NAAQS for six "criteria" pollutants considered harmful to public health and the environment. The NAAQS pollutants are particulate matter (PM), ozone (O₃), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO), and lead (Pb). Section 109 of the CAA Amendments of 1990 established two types of NAAQS - primary and secondary standards. Primary standards are set at a level requisite to protect public health with an adequate margin of safety, including the health of at-risk populations. Secondary standards are set at a level requisite to protect public welfare from any known or anticipated adverse effects, such as decreased visibility and damage to animals, crops, vegetation, and buildings. The CAA requires EPA to review the science upon which the NAAQS are based and the standards themselves every five years. These national standards form the foundation for air quality management and establish goals that protect public health and the environment.

Air Pollution Information Tracking

For each of the six criteria pollutants, under Section 110 of the CAA, EPA tracks two kinds of air pollution information: air pollutant concentrations based on actual measurements in the ambient

(outside) air at monitoring sites throughout the country; and pollutant emissions based on engineering estimates or measurements of the total tons of pollutants released into the air each year.

Air Quality Management Planning

Under CAA Section 110, EPA develops regulations and guidance to clarify requirements for state and local air agencies for developing State Implementation Plans (SIPs) for implementing the NAAQS. EPA works with state and local governments to ensure the technical integrity of emission source controls in SIPs and with tribes on Tribal Implementation Plans (TIPs). EPA also reviews SIPs to ensure they are consistent with applicable requirements of the CAA and takes regulatory action on SIP submissions consistent with CAA responsibilities.

New Source Review (NSR) Preconstruction Permit Program

The NSR preconstruction permit program in Title I of the CAA is a part of state plans to attain and maintain the NAAQS. The two primary aspects of this program are the Prevention of Significant Deterioration program, described in Section 165 of the CAA, and the Nonattainment NSR program, described in various parts of the CAA, including Sections 173 and 182.

Protection of Class I Areas

Sections 169A and 169B of the CAA require protection of visibility for 156 congressionally mandated national parks and wilderness areas, known as Class I areas. Congress established a national goal of returning visibility in the Class I areas to natural conditions (i.e., the visibility conditions that existed without manmade air pollution). The Regional Haze Rule sets forth the requirements that state plans must satisfy to make reasonable progress towards meeting this national goal.

Control of Air Toxics

Toxic air pollutants are known to cause or are suspected of causing increased risk of cancer and other serious health effects, such as neurological damage and reproductive harm. EPA assists state, tribal, and local air pollution control agencies in characterizing the nature and scope of their air toxics issues through modeling, emission inventories, monitoring, and assessments. For example, EPA maintains updated air toxic emission and exposure data, incorporating current toxicity data to provide recent information on air toxics risks from a national perspective. EPA also supports programs that reduce inhalation risk and multi-pathway risk posed by deposition of air toxics to water bodies and ecosystems, facilitates international cooperation to reduce transboundary and intercontinental air toxics pollution, develops risk assessment methodologies for toxic air pollutants, and provides training for air pollution professionals.

The provisions of the CAA that address the control of air toxics are located primarily in Section 112. This section requires issuing National Emission Standards for Hazardous Air Pollutants (NESHAP) for major sources and area sources; the assessment and, as necessary, regulation of risks remaining after implementation of NESHAP that are based on Maximum Available Control Technology (MACT); the periodic review and revision of all NESHAP to reflect developments in practices, processes, and control technologies; and associated national guidance and outreach. In addition, EPA must periodically review, and, where appropriate, revise both the list of air toxics subject to regulation and the list of source categories for which standards must be developed. EPA

has promulgated approximately 180 rules to control air toxics under Section 112 and is continually engaged in their periodic review and revision. EPA will enhance risk assessment capabilities to better identify and determine impacts of exposures to air toxics on communities. The Program will prioritize its work, as resources allow, with an emphasis on meeting court-ordered deadlines and also incorporating environmental justice considerations as part of the decision-making process. Section 129 of the CAA requires a similar approach to review regulations applicable to solid waste incinerators. EPA has promulgated approximately six rules to control air toxics under Section 129 and is continually engaged in their periodic review and revision. In addition to this regulatory work, EPA also provides determinations to states and industry seeking information about source-specific applicability of these regulations. EPA also is making improvements to the database that tracks applicability determinations.

Climate Change

The President has prioritized action to tackle climate change with a focus on an equitable transition to clean energy. These plans call for cuts in greenhouse gas (GHG) pollution to reduce the contribution of human activities to climate change and its impacts on public health, while investing in communities that are on the front line of impacts. EPA issues regulations to limit GHGs and assists states, tribes, and local air pollution control agencies in the development, implementation, and evaluation of programs to reduce GHG pollution. The Program also supports the Agency's work with international partners to combat short-lived climate pollutants. These air pollutants, including black carbon (a component of PM), methane, and tropospheric ozone, are contributing to and accelerating the impacts of climate change.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.1, Improve Air Quality and Reduce Localized Pollution and Health Impacts in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA is requesting an \$100 million increase to develop and implement a community air quality monitoring and notification program to provide real-time data to the public in areas with greatest exposure to harmful levels of pollution, as described in Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad*. This increase supports work to reduce GHG emissions to tackle the climate crisis and ensure equitable environmental outcomes to advance environmental justice.

In FY 2023, EPA also is requesting \$41 million and 91.4 FTE to support critical work to implement climate and clean air regulations and programs. This includes anticipated emission guidelines for existing oil and gas facilities. Section 111(d) of the Clean Air Act provides states with a lead implementing role and considerable flexibility, and the development and implementation of the emission guidelines will require extensive work to develop program implementation infrastructure; engage states, tribal nations, and communities; assess environmental justice impacts; evaluate state plans; and ensure consistent application of the emissions guidelines nationwide. These resources will be used to continue developing a standard reporting system for states to use, or adapt as needed, for submitting plans and tracking their compliance data, and ensuring that communities have access to that data.

This also includes an increase in support for NAAQS review work and implementation activities, many of which are increasingly complex. Critical to successful implementation is timely issuance of guidances, ongoing outreach to states and other entities as well as development of NAAQS implementation tools. EPA will engage with states and develop guidance to assist air programs with meeting implementation deadlines. These critical resources also will support efforts to reduce the SIP backlog as well as ensure timeliness of review of incoming SIPs, permitting needs (both NAAQS and GHG-related), and air quality monitoring and analysis needs. This increase also will enhance EPA's abilities to forecast where smoke will impact people; identify and communicate when and where smoke events are occurring through monitoring and AirNow's Fire and Smoke Map; build local capacity to be Smoke Ready so exposure to smoke is reduced; and strengthen internal as well as state, local and tribal capacity to better coordinate and communicate regarding wildfire smoke and address related regulatory activities.

Addressing Climate Change

EPA expects to take final action under Section 111 in FY 2023 for actions that were proposed in FY 2022 in accordance with Executive Order 13990, which directed EPA to consider "proposing new regulations to establish comprehensive standards of performance and emission guidelines for methane and volatile organic compound emissions from existing operations in the oil and gas sector, including the exploration and production, transmission, processing, and storage segments, by September 2021." This request includes resources to fulfill the President's commitment to engage meaningfully with environmental justice communities during the entire rulemaking process, from pre-proposal through final promulgation and implementation. Executive Order 13990 also directs EPA to revise and address as appropriate the regulation of GHGs from fossil-fuel fired power plants. Electricity production generates the second largest share of GHG emissions. EPA will carefully craft an equitable approach informed by engagement with communities and a fresh look at the policies, technology, and data. EPA plans to propose these emission guidelines in FY 2023.

EPA will continue to work with other countries to take action to address climate change. EPA will consider the results of a range of international assessments to address the climate impacts of short-lived climate pollutants. Reducing emissions of these pollutants can create near-term climate and public health benefits. EPA will continue to identify the most significant domestic and international sources of black carbon and ozone precursor emissions by working with the multilateral Climate and Clean Air Coalition (CCAC), the Arctic Council, the Convention on Long-range Transboundary Air Pollution (LRTAP), and other related international efforts. Based on these findings and enhanced analytical capabilities, EPA will pursue effective steps for reducing these emissions. For instance, EPA is scaling up efforts in low-and middle-income countries to implement best practices for addressing air pollution in ways that achieve climate cobenefits.

Finally, in FY 2023, the Agency will provide on-the-ground resources to assist overburdened and underserved communities as they work to engage on EPA's regulatory efforts and address the impacts of climate change. These community resource coordinators will work with external partners, such as community stakeholder organizations, other federal agencies, state, local and regional governments, private sector entities, academic institutions, and foundations to assist

communities as they begin to plan for climate change and implement actions to increase resilience to climate impacts.

Improving Air Quality

In FY 2023, resources are increased to support efforts to maintain and rebuild programmatic capabilities that focus on protecting clean air. Air quality has improved significantly for communities across the country since passage of the CAA in 1970 (with amendments in 1977 and 1990). Between 1990 and 2020, for example, national average levels have decreased by 25 percent for ozone, 26 percent for coarse particulate matter, 91 percent for sulfur dioxide, and 98 percent for lead. ²⁰⁵ In FY 2023, EPA will continue to prioritize key activities in support of attainment of the NAAQS and implementation of stationary source regulations by state, tribal, and local air agencies. This includes activities in key nonattainment areas along the U.S. -Mexico border as part of U.S. commitments under the *Border 2025* agreement.

NAAQS Review

In FY 2023, EPA will continue its CAA-mandated responsibilities to review the science upon which the NAAQS are based and the standards themselves. Periodic review of the NAAQS requires significant resources and analysis of scientific and technical information to ensure for each NAAQS that public health is protected with an adequate margin of safety, considering at-risk populations.

The President directed EPA to review the 2020 PM NAAQS and the 2020 Ozone NAAQS in accordance with Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*. EPA has requested resources in FY 2023 to better incorporate science and input from the reestablished Clean Air Scientific Advisory Committee and to assess information received during the public process for rulemakings to finalize these reviews. In FY 2023, EPA will continue reviewing the NAAQS and has requested resources commensurate to support these reviews. Each review involves a comprehensive reexamination, synthesis, and evaluation of scientific information, the design and conduct of complex air quality and risk and exposure analyses, and the development of a comprehensive policy assessment providing analysis of the scientific basis for alternative policy options.

EPA will continue to administer the NAAQS by reviewing state plans and decisions consistent with statutory obligations; taking federal oversight actions, such as action on SIP and TIP submittals; and developing regulations and policies to ensure continued health and welfare protection during the transition between existing and new standards. EPA will work with air agencies to determine the need for additional federal rulemakings and guidance documents to support state and tribal efforts to implement CAA SIP requirements, in alignment with capacity and priorities. EPA will provide technical and policy assistance to states and tribes developing or revising SIPs/TIPs. To the extent that the above-referenced NAAQS reviews result in a change to the standards, air quality designations related activities for the changed standard(s) would be required. The timing of this work would depend on when the final NAAQS are promulgated.

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²⁰⁵ For additional information on air quality trends, please see Air Quality -National Summary at: https://www.epa.gov/air-trends/air-quality-national-summary and at *Our Nation's Air: Status and Trends Through 2020*, found at: https://gispub.epa.gov/air/trendsreport/2021/.

NAAQS Nonattainment Areas

EPA, in close collaboration with states and tribes, will work to improve air quality in areas not in attainment with the NAAQS. The Agency will continue to implement changes to improve the efficiency and effectiveness of the SIP process, with a goal of maximizing the timely processing of state-requested SIP actions and reducing the backlog. The Agency also will act on redesignation requests of nonattainment areas to attainment in a timely manner. EPA will maximize use of its comprehensive, online State Planning Electronic Collaboration System (SPeCS) to promote efficiencies for states to submit SIP revisions to EPA, and for EPA to track and process state submittals. Since it launched in January 2018, more than 1,250 SIP submittals (about 90 percent official submissions and 10 percent draft submittals) have come through SPeCS, and more than 400 users have registered from all 50 states and eight air districts. EPA also will further develop SPeCS functionality to provide additional transparency to the public about NAAQS nonattainment areas, state SIP requirements, and related EPA actions.

SIPs for Regional Haze

In FY 2023, EPA will continue reviewing and taking action on regional haze SIP revisions for the second planning period. EPA would continue to work on any outstanding SIP matters and continue providing technical assistance to ensure that states are making reasonable progress towards their visibility improvement goals, consistent with statutory obligations. Under the Regional Haze Rule, states are required to submit updates to their plans to demonstrate how they have and will continue to make progress towards achieving their visibility improvement goals. EPA also may be working on regulatory updates for future planning periods.

Fulfilling Legal Obligations

One of EPA's priorities is to fulfill its statutory and court-ordered obligations. Section 112 of the CAA sets deadlines for EPA to review and update, as necessary, all NESHAP every eight years, accounting for developments in practices, processes, and technologies related to those standards. Section 112 also requires that EPA conduct risk assessments within eight years of promulgation of each MACT-based NESHAP to determine if it appropriately protects public health and to revise it as needed. EPA also will be undertaking three actions related to reviewing and revising the list of hazardous air pollutants, as Section 112 requires. In FY 2023, EPA will undertake these required reviews and associated rulemakings. EPA will enhance risk assessment capabilities to better identify and determine impacts on communities. The Program will prioritize conducting reviews of NESHAP for more than 32 source categories, many of which are subject to court-ordered or court-entered dates or are actions otherwise required by courts, and incorporate environmental justice considerations as part of the decision-making process. From this work, EPA expects to propose or promulgate more than 20 rules in FY 2023. EPA also expects to be undertaking actions related to reviewing and revising the list of hazardous air pollutants, as Section 112 requires.

In addition, under Section 129 of the CAA, in FY 2023 EPA plans to propose one rule regarding incineration and control technologies that supports other rules issued under Section 129.

Technical Assistance to External Government Partners

EPA will assist other federal agencies and state and local governments in implementing the conformity regulations promulgated pursuant to Section 176 of the CAA. These regulations require

federal agencies, taking actions in nonattainment and maintenance areas, to ensure that the emissions caused by their actions will conform to the SIP.

In FY 2023, EPA will provide technical assistance to state, local, and tribal air agencies for both NSR and Title V (operating) permits. This support will occur at appropriate times and as requested, consistent with applicable requirements, before and during the permitting process. EPA expects to implement such support in an efficient manner and consistent with established timeframes for applicable oversight of state, tribal, and local air agencies during the permitting process. EPA's Electronic Permitting System and Title V petition submittal portal will improve EPA interaction with state, local, and tribal air agencies and the general public, and improve data availability and transparency.

EPA will assist state, tribal, and local air agencies with various technical activities. EPA develops and provides a broad suite of analytical tools, such as: source characterization analyses; emission factors and inventories; statistical analyses; source apportionment techniques; quality assurance protocols and audits; improved source testing and monitoring techniques; source-specific dispersion and regional-scale photochemical air quality models; and augmented cost/benefit tools to assess control strategies. ²⁰⁶ The Agency will maintain the core function of these tools (e.g., integrated multiple pollutant emissions inventory, air quality modeling platforms, etc.) to provide the technical underpinnings for scientifically sound, efficient and comprehensive air quality management by state, local, and tribal agencies.

In FY 2023, EPA will continue to provide information and assistance to Tribes, states, and communities through documents, websites, webinars, and training sessions on tools to help them build capacity and to provide input into environmental justice assessments that can inform risk reduction strategies for air toxics. The Agency will continue to communicate and effectively collaborate with communities to address a myriad of environmental concerns.

In FY 2023, EPA will continue to support critical response to the growing number of wildfire smoke events through real-time, accessible air quality information, as well as supporting communication documents and websites. The Agency will partner with other federal agencies, such as the Center for Disease Control and the U.S. Forest Service to ensure a consistent and coherent response. EPA expects this work to support tribal, state, local, and community needs to prepare for an increasing number of wildfires and the impacts those fires have on public health across the country.

In FY 2023, state and local air agencies will continue to lead the implementation of the National Air Toxics Trends Sites (NATTS). The NATTS Program is designed to capture the impacts of widespread air toxics and is comprised of long-term monitoring sites throughout the Nation.²⁰⁷ EPA will continue to consult on priority data gaps in order to improve the assessment of population exposure to toxic air pollution.

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²⁰⁶ For additional information, please see: https://www.epa.gov/technical-air-pollution-resources.

²⁰⁷ For additional information, please see: https://www.epa.gov/amtic/air-toxics-ambient-monitoring.

Maintaining Analytical Capabilities and Continuing Data Management

EPA will maintain baseline analytical capabilities required to develop effective regulations including: analyzing the economic impacts and health benefits of regulations and policies; developing and refining source sampling measurement techniques to determine emissions from stationary sources; updating dispersion models for use in source permitting; and conducting air quality modeling that characterizes the atmospheric processes that disperse a pollutant emitted by a source. Resources from the Science and Technology appropriation component of this program support the scientific development of these capabilities.

The President's FY 2023 budget request included \$100 million for a new community air quality monitoring and notification program to support efforts to deliver environmental justice for overburdened and marginalized communities. This community air quality monitoring and notification program will be able to provide real-time data to the public in areas with greatest exposure to harmful levels of pollution, as described in Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad*. In FY 2023, the Agency will continue to work closely with states, tribes, and local air quality agencies to develop the most effective approach to meet community concerns. Funds will support several efforts, including tribal, state, and local grants that supplement the national ambient air quality monitoring network including enhancement of air quality characterization in communities, a competitive grant program promoting air monitoring partnerships with communities, systems to manage and deliver real-time air quality data to the public, and management and implementation activities performed by the Agency.

In FY 2023, EPA will operate and maintain the Air Quality System (AQS), one of the Agency's mission-essential functions, which houses the Nation's air quality data. EPA will provide the core support needed for the AQS Data Mart, which provides access to the scientific community and others to obtain air quality data via the internet. The Agency is exploring a future combined ambient data process to facilitate a streamlined approach to improve the availability of air quality data for our regulatory partners and the public.

The Agency's national real-time ambient air quality data system (AirNow) will maintain baseline operations. Data show the public is increasingly relying on AirNow for air quality information during wildfires. In FY 2023, EPA will continue improving the Fire and Smoke map, including engaging tribal, state, and local agencies for input.

EPA will continue to operate and maintain the Emissions Inventory System (EIS), a system used to quality assure and store current and historical emissions inventory data, and to support development of the National Emissions Inventory (NEI). EPA, states, and others use the NEI to support state and local air agency SIP development, serve as a vital input to air quality modeling, help analyze public health risks from air toxics and develop strategies to manage those risks, as well as support multi-pollutant analysis for air emissions. The Agency is working on user-focused improvements to the EIS, including the addition of online user guides and changing the data submission format to make it easier to report emissions inventory data. EPA will streamline NEI development and reduce the burden for industry to meet emissions data reporting requirements through the Combined Air Emissions Reporting (CAER) e-Enterprise effort. The CAER project, when fully developed and deployed, will streamline multiple emissions reporting processes and is expected to reduce the cost to industry and government for providing and managing environmental data and improve decision-making capacity through more timely availability of the data.

In FY 2023, EPA will initiate a multi-phased process for strengthening air pollution benefits analysis methods in an effort to improve the science it uses to quantify benefits from air quality regulations. EPA will develop a draft benefits *Guidelines* document outlining best practices for incorporating new scientific information into methods for benefits analysis. This will be followed by additional reviews of specific methods and applications. This effort will help ensure transparency and confidence in the process for selecting and applying the latest science in benefits analysis. EPA also will improve tools and approaches to enable more robust analysis of program impacts on communities with environmental justice concerns and vulnerable populations.

As part of a forward-looking air toxics strategy, EPA will address these regulatory and emerging issues and improve access to air toxics data. The Agency will transition to a new approach to share air toxics data faster and more regularly to the public, allowing for increased transparency and the ability to see trends and risks over time. By 2023, EPA will start reporting the most current air toxics data each year in the annual Air Trends Report and an online interactive tool instead of the current three to four-year cycle and providing that data at an increased spatial resolution.

Performance Measure Targets:

(PM NAAQS) Percentage of air quality improvement in counties not meeting current NAAQS.	FY 2022 Target	FY 2023 Target
	7	8
(PM NAAQS2) Percentage of people with low SES living in areas where the	FY 2022	FY 2023
air quality meets the PM _{2.5} NAAQS.	Target	Target
	90	03

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$9,932.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$100,000.0) This program change is an increase to develop and implement a community air quality monitoring and notification program to provide real-time data to the public in areas with greatest exposure to harmful levels of pollution. This increase supports work to reduce GHG emissions to tackle the climate crisis and ensure equitable environmental outcomes to advance environmental justice.
- (+\$33,470.0 / +85.4 FTE) This program change is an increase in support for critical priority work for implementation of climate and clean air regulations, including anticipated emissions guidelines for oil and gas and NAAQS review work and related implementation activities, such as development of guidance, review of SIPs and permits, and air monitoring and analyses. This investment includes \$15.11 million in payroll.
- (+\$7,588.0 / + 6.0 FTE) This program change is an increase that will enhance EPA's abilities to forecast where smoke will impact people; identify and communicate when and where smoke events are occurring through monitoring and AirNow's Fire and Smoke Map;

build local capacity to be Smoke Ready so exposure to smoke is reduced; and strengthen internal as well as state, local, and tribal capacity to better coordinate and communicate regarding wildfire smoke and address related regulatory activities. This investment includes \$1.062 million in payroll.

Statutory Authority:

Clean Air Act.

Stratospheric Ozone: Domestic Programs

Program Area: Clean Air and Climate Goal: Ensure Clean and Healthy Air for All Communities Objective(s): Improve Air Quality and Reduce Localized Pollution and Health Impacts

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$4,805	\$4,633	\$26,607	\$21,974
Total Budget Authority	\$4,805	\$4,633	\$26,607	\$21,974
Total Workyears	20.6	18.9	39.6	20.7

Program Project Description:

EPA's stratospheric ozone protection program implements provisions of the Clean Air Act (CAA) and the *Montreal Protocol on Substances that Deplete the Ozone Layer* (Montreal Protocol), which facilitates a global phaseout of ozone-depleting substances (ODS). The Program also implements the American Innovation and Manufacturing (AIM) Act of 2020 to phase down climate-damaging hydrofluorocarbons (HFCs). These actions help protect both the climate system and the stratospheric ozone layer, which shields all life on Earth from harmful solar ultraviolet (UV) radiation.

Scientific evidence demonstrates that ODS used around the world destroy the stratospheric ozone layer, ²⁰⁸ which raises the incidence of skin cancer, cataracts, and other illnesses through overexposure to increased levels of UV radiation. ²⁰⁹ Based on recent updates to EPA's peer-reviewed Atmospheric and Health Effects Framework model, the Montreal Protocol is expected to prevent approximately 443 million cases of skin cancer, 2.3 million skin cancer deaths, and 63 million cases of cataracts for people in the United States born in the years 1890–2100. ²¹⁰ EPA developed this model to better understand the benefits to public health of stratospheric ozone protection. As a result of global action to phase out ODS, the ozone layer is expected to recover to its pre-1980 levels by mid-century. The AIM Act addresses the climate impact of HFCs by phasing down their production and consumption, maximizing reclamation and minimizing releases of HFCs and their substitutes from equipment, and facilitating the transition to next-generation technologies through sector-based restrictions. A global phasedown of HFCs is expected to prevent up to 0.5 °C of global warming by 2100.

²⁰⁸ World Meteorological Organization (WMO). Scientific Assessment of Ozone Depletion: 2014. Global Ozone Research and Monitoring Project–Report No. 56, Geneva, Switzerland, 2014.

²⁰⁹ Fahey, D.W., and M.I. Hegglin (Coordinating Lead Authors), Twenty questions and answers about the ozone layer: 2014 Update, In Scientific Assessment of Ozone Depletion: 2014, Global Ozone Research and Monitoring Project–Report No. 56, World Meteorological Organization, Geneva. Switzerland. 2014.

Available on the internet at: https://csl.noaa.gov/assessments/ozone/2014/twentyquestions/.

²¹⁰ U.S. Environmental Protection Agency (EPA). Updating the Atmospheric and Health Effects Framework Model: Stratospheric Ozone Protection and Human Health Benefits. EPA: Washington, DC. May 2020. Available on the internet at: https://www.epa.gov/sites/production/files/2020-04/documents/2020_ahef_report.pdf.

EPA uses a combination of regulatory and partnership programs to implement Title VI of the CAA and the AIM Act and to further the protection of the ozone layer and climate system. Title VI provides for a phaseout of production and consumption of ODS and requires controls on their use, including banning certain emissive uses, requiring labeling to inform consumer choice, and requiring sound servicing practices for the use of refrigerants in air conditioning and refrigeration appliances. Title VI also prohibits venting ODS and their substitutes and requires listing of alternatives that reduce overall risks to human health and the environment, ensuring that businesses and consumers have alternatives that are safer for the ozone layer than the chemicals they replace.

The AIM Act provides for a phasedown of production and consumption of HFCs in the United States by 85 percent, supports industry's transition to next-generation technology, and requires management of HFCs and HFC substitutes. In September 2021, EPA issued a final rule establishing an allowance allocation program to implement the phasedown, as well as robust compliance assurance and enforcement mechanisms to provide a level playing field for producers and importers of HFCs and ensure the program delivers the intended environmental benefits. EPA also worked with U.S. Customs and Border Protection to create an interagency task force to prevent and deter illegal trade in HFCs, and support the enforcement of the phasedown.

As a signatory to the Montreal Protocol, the U.S. is committed to ensuring that our domestic program is at least as stringent as international obligations, and to regulating and enforcing the terms of the Montreal Protocol respective of domestic authority. In 2007, with U.S. leadership, the Parties to the Montreal Protocol agreed to a more aggressive phaseout for ozone-depleting hydrochlorofluorocarbons (HCFCs) equaling a 47 percent reduction in overall emissions during the period 2010 – 2040. The adjustment in 2007 also called on Parties to the Montreal Protocol to promote the selection of alternatives to HCFCs that minimize environmental impacts, in particular impacts on climate. The CAA provides the necessary authority to ensure EPA can collect and validate data, and where appropriate, report data on production and consumption of ODS on behalf of the United States. The Parties to the Montreal Protocol also agreed to the Kigali Amendment in 2016, which seeks to globally phase down the production and consumption of HFCs consistent with the AIM Act. If the United States ratifies the Kigali Amendment, EPA will use the authority in the AIM Act to collect and validate data, and where appropriate, report data on production and consumption of HFCs on behalf of the United States.

Partnership programs are calibrated to increase benefits by focusing on specific areas where the Agency has identified significant opportunities. The Responsible Appliance Disposal (RAD) Program²¹⁴ is a partnership that protects the ozone layer and reduces emissions of greenhouse gases through the recovery of ODS and HFCs from old refrigerators, freezers, window air conditioners, and dehumidifiers prior to disposal. RAD has more than 50 partners, including manufacturers, retailers, utilities, and state governments. The GreenChill Partnership²¹⁵ helps

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²¹¹ Montreal Protocol Decision XIX/6: Adjustments to the Montreal Protocol with regard to Annex C, Group I, substances (hydrochlorofluorocarbons).

²¹² In the event that the United States ratifies the Kigali Amendment, EPA has authority under the AIM Act to collect the data needed for reporting on HFCs under the Montreal Protocol.

²¹³Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, Kigali 15 October 2016, found at: https://treaties.un.org/doc/Publication/CN/2016/CN.872.2016-Eng.pdf.

²¹⁴ For more information, see: https://www.epa.gov/rad

²¹⁵ For more information, see: http://www.epa.gov/greenchill.

supermarkets transition to environmentally friendlier refrigerants, reduce harmful refrigerant emissions, and move to advanced refrigeration technologies, strategies, and practices that lower the industry's impact on the ozone layer and climate. The Program includes stores in all 50 states and represents over 30 percent of the United States' supermarkets. GreenChill partners are reducing refrigerant leak rates to half the estimated national average and developing annual plans for further improvements.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.1, Improve Air Quality and Reduce Localized Pollution and Health Impacts in the *FY 2022 - 2026 EPA Strategic Plan*. Work in this program also supports progress toward the Agency Priority Goal to reduce the production and consumption of HFCs.

In carrying out the requirements of the CAA and the Montreal Protocol in FY 2023, EPA will continue to meet its ODS consumption caps and work toward the required gradual reduction in production and consumption of ODS. To meet the FY 2026 long-term performance goal for lowering consumption of HCFCs to 76.2 tons per year of ozone-depletion potential, EPA will: issue allocations for HCFC production and import in accordance with the requirements established under CAA Sections 605 and 606; review petitions to import used ODS under sections 604 and 605; manage information that industry identifies as confidential under CAA Section 603; and implement regulations concerning the production, import, and export of ODS and maintenance of the tracking system used to collect the information. EPA intends to finalize a rule on process agent uses of ODS and propose a rule on feedstock uses of ODS in FY 2023. EPA also will prepare and submit the annual report under Article 7 of the Montreal Protocol on U.S. consumption and production of ODS consistent with the treaty.²¹⁷

EPA will continue to implement the CAA Section 608 refrigerant management requirements related to the use and emission of ODS, HFCs and other substitutes.

CAA Section 612 requires continuous review of alternatives for ODS through EPA's Significant New Alternatives Policy (SNAP) program²¹⁸ to both find those that pose less overall risk to human health and the environment and ensure a smooth transition to safer alternatives. Through these evaluations, SNAP generates lists of acceptable and unacceptable substitutes for approximately 50 end-uses across eight industrial sectors. In *Mexichem Fluor v. EPA*, the DC Circuit Court partially vacated a 2015 rule "to the extent it requires manufacturers to replace HFCs with a substitute substance" and remanded the rule to EPA for further proceedings. A second court decision applies similarly to a 2016 rule. EPA expects to propose a notice-and-comment rulemaking in FY 2022 that would address the court decisions and intends to finalize the rule in FY 2023. In addition, in FY 2023, EPA expects to list through notice as well as propose notice-and-comment rulemaking that would expand the list of acceptable lower-GWP alternatives, particularly for end-uses where

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²¹⁶ The HCFC consumption cap of 15,240 ODP-weighted metric tons for the U.S. was effective January 1, 1996, and became the U.S. consumption baseline for HCFCs.

²¹⁷ The Article 7 report prepared by EPA on behalf of the United States contains chemical-specific production, import and export data that is not available publicly. To protect potential confidential information the report is not available on the internet; however, the data included in the report is aggregated and available at: https://ozone.unep.org/countries/profile/usa.

²¹⁸ For more information, please see: https://www.epa.gov/snap.

there is an urgent need for more options, which also will support implementation of the AIM Act. EPA also will continue to work towards ensuring the uptake of safer alternatives and technologies, while supporting innovation, and ensuring adoption of alternatives through support for changes to industry codes and standards.

With the decline in allowable ODS production, a significant stock of equipment that continues to use ODS will need access to recovered and recycled/reclaimed ODS to allow for proper servicing. EPA will continue to review available market and reported data to monitor availability of recycled and reclaimed ODS where production and import of new material is phased out to support this need. In addition, EPA will continue to implement a petition process to allow for the import of used ODS (primarily halon) for fire suppression purposes. EPA also will implement other provisions of the Montreal Protocol, including exemption programs to allow for a continued smooth phaseout of ODS, particularly for laboratory and analytical uses, feedstock, process agents, and HCFCs used consistent with the servicing tail.

In FY 2023, the Agency also will continue to implement the AIM Act HFC phasedown through an allowance allocation and trading program established in FY 2021 and this work will support implementation of EPA's Agency Priority Goal. To further this goal, the Agency has requested additional resources to restore staff capacity and develop a new grant program aimed at assisting small businesses with the purchase of specialized equipment for the recycling, recovery, or reclamation of a substitute for a regulated substance as authorized in the AIM Act.

The Agency will continue to implement an HFC reporting system and develop additional tracking and review tools to better ensure compliance with the phasedown regulations, and work with other agencies to prevent illegal imports. EPA also will finalize a regulation proposed in FY 2022 to issue allowances for HFC production and consumption for calendar years 2024 and future years.

Under subsection (h) of the AIM Act, in FY 2023 EPA will propose a notice and comment rulemaking to control certain practices, processes, or activities regarding the servicing, repair, disposal, or installation of equipment that involves a regulated substance, a substitute for a regulated substance, the reclaiming of a regulated substance used as a refrigerant, or the reclaiming of a substitute for a regulated substance used as a refrigerant.

Under subsection (i) of the AIM Act, the Agency will finalize regulations proposed in FY 2022 to restrict fully, partially, or on a graduated schedule, the use of a regulated substance in the sector or subsector in which the regulated substance is used, promoting a transition to next-generation technologies. Other activities under subsection (i) include granting and/or denying petitions for sector-based restrictions on HFCs.

The AIM Act also authorizes EPA to establish a grant program for small businesses for purchase of recycling, recovery, or reclamation equipment for HFC substitutes, including for servicing motor vehicle air conditioners. In FY 2023, additional funding is included for the development of a new grant program to assist small businesses with the purchase of specialized equipment for the recycling, recovery, or reclamation of a substitute for a regulated substance as authorized in the AIM Act.

In FY 2023, EPA will continue to provide technical expertise for the Montreal Protocol's Technology and Economic Assessment Panel and its Technical Options Committees, advancing reductions of ODS and HFC consumption and ensuring U.S. interests are represented.

In FY 2023, EPA will continue to support a level playing field for companies operating legally under the CAA and AIM Act regulations and those that have transitioned to alternatives for ODS and HFCs. EPA exchanges data with U.S. Customs and Border Protection and Homeland Security Investigations on ODS and HFC importers and exporters to determine admissibility and target illegal shipments entering the United States, as well as reviews and approves imports flagged in the Automated Commercial Environment. This is particularly important in light of recent atmospheric measurements showing unexpected increased emissions of CFC-11, an ODS phased out of production globally, ^{219,220} and given the new AIM Act regulations. EPA also will work with partner agencies, including through the Interagency Task Force on Illegal HFC Trade, to detect, deter, and disrupt any attempt to illegally import or produce HFCs in the United States. In addition, EPA will work to support federal sector management and transition from HFCs through continued cooperation with organizations such as Department of Defense and the General Services Administration.

Performance Measure Targets:

(PM HFC) Remaining U.S. consumption of hydrofluorocarbons (HFCs).	FY 2022	FY 2023
	Target	Target
	273.5	273.5
(PM HCFC) Remaining U.S. consumption of hydrochlorofluorocarbons	FY 2022	FY 2023
(HCFCs), chemicals that deplete the Earth's protective ozone layer, in ozone	Target	Target
depletion potential (ODP)-weighted metric tons.	76.2	76.2

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$572.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$16,402.0 / +20.7 FTE) This program change is an increase to implement provisions in the American Innovation and Manufacturing Act to phase down the use of HFCs, to facilitate U.S. entry to the Kigali amendment to the Montreal Protocol, and to restore staff capacity around efforts to tackle the climate crisis. This investment includes \$3.625 million in payroll.

²¹⁹ See, Montzka *et al.* An unexpected and persistent increase in global emissions of ozone-depleting CFC-11, Nature, volume 557, pages 413–417, 2018. Available on the internet at: https://www.nature.com/articles/s41586-018-0106-2.

²²⁰ See, Rigby *et al*. Increase in CFC-11 emissions from eastern China based on atmospheric observations, Nature, volume 569, pages 546-550, 2019. Available on the internet at: https://www.nature.com/articles/s41586-019-1193-4.

• (+\$5,000.0) This program change is an increase for the development of a new grant program to assist small businesses with the purchase of specialized equipment for the recycling, recovery, or reclamation of a substitute for a regulated substance as authorized in the AIM Act.

Statutory Authority:

Title VI of the Clean Air Act and the American Innovation and Manufacturing Act.

Stratospheric Ozone: Multilateral Fund

Program Area: Clean Air and Climate Goal: Ensure Clean and Healthy Air for All Communities Objective(s): Improve Air Quality and Reduce Localized Pollution and Health Impacts

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management		_		555
Total Budget Authority	\$8,326	\$8,711	\$18,000	\$9,289

Program Project Description:

The Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol) is the international treaty designed to protect the stratospheric ozone layer by facilitating a global phaseout of ozone-depleting substances (ODS) and since 2016, phasing down climate-damaging hydrofluorocarbons (HFCs) under its Kigali Amendment. EPA is phasing down ODS under Title VI of the Clean Air Act and HFCs under the American Innovation and Manufacturing (AIM) Act of 2020. As a result of global action to phase out ODS, the ozone layer is expected to recover to its pre-1980 levels by mid-century. A global phasedown of HFCs is expected to prevent up to 0.5 °C of global warming by 2100.

The *Multilateral Fund for the Implementation of the Montreal Protocol* (Multilateral Fund) was created by the Parties to the Montreal Protocol to provide funds that enable developing countries to comply with their Montreal Protocol obligations following agreed upon schedules. The United States and other developed countries contribute to the Multilateral Fund. The United States holds a permanent seat on the Multilateral Fund's governing body (the Executive Committee) and can help focus efforts on cost-effective assistance and encourage climate-friendly transitions. The U.S. contribution to the Multilateral Fund is split between EPA and the Department of State.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.1, Improve Air Quality and Reduce Localized Pollution and Health Impacts in the *FY 2022 - 2026 EPA Strategic Plan*.

EPA's contributions to the Multilateral Fund in FY 2023 will primarily continue to support cost-effective projects designed to build capacity and eliminate ODS production and consumption in over 140 developing countries and provide early support for the global phasedown of HFCs. Through 2020, the Multilateral Fund supported over 7,833 activities in 146 countries that, when fully implemented, will phase out more than 490,000 ozone-depletion potential metric tons. Additional projects will be submitted, considered, and approved in accordance with Multilateral Fund guidelines.

In FY 2023, the United States will continue to promote developing country transitions to climate-friendly alternatives and reduce HFC-23 byproduct emissions. The United States also will support preparatory activities such as establishing HFC baselines, phasedown starting points, and other activities to ensure that the global HFC phasedown will leverage the expertise and experience gained during the 30-year history with phasing out ODS. Taken together, this work will support developing country compliance with Protocol obligations.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$9,289.0) This program change is an increase to help fund additional activities associated with the adoption of the Kigali Amendment and developing country phase down of HFCs while continuing to support ODS phaseout activities.

Statutory Authority:

Title VI of the Clean Air Act.

Compliance

Compliance Monitoring

Program Area: Compliance

Goal: Enforce Environmental Laws and Ensure Compliance Objective(s): Detect Violations and Promote Compliance

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$97,583	\$102,500	\$144,770	\$42,270
Inland Oil Spill Programs	\$132	\$139	\$2,146	\$2,007
Hazardous Substance Superfund	\$1,778	\$1,000	\$1,015	\$15
Total Budget Authority	\$99,493	\$103,639	\$147,931	\$44,292
Total Workyears	439.1	453.9	463.4	9.5

Program Project Description:

The Compliance Monitoring Program is a key component of EPA's Enforcement and Compliance Assurance Program that supports both compliance with federal environmental laws as well as efforts to identify noncompliance. Compliance monitoring activities, such as inspections, investigations, and review of self-reported compliance monitoring information, or other forms of offsite compliance monitoring, are conducted by EPA and our coregulators (states, federally recognized tribes, and territories) to determine if regulated entities are complying with environmental statutes as well as applicable regulations and permit conditions. Compliance information gathered from these activities is reported into EPA's data systems and used for analyses and targeting, and to make information available to co-regulators and the public. These activities and data also can be utilized to identify programs and sectors with high noncompliance to be the subject of national compliance and enforcement initiatives, and to identify conditions that may present an imminent and substantial endangerment to human health and the environment and thereby warrant immediate attention. Given the large number of regulated entities, effective targeting of compliance monitoring and analysis of compliance data play a critical role in achieving the goals EPA has set forth for protecting health and the environment.

Tools in the Compliance Monitoring Program include:

• Compliance Program Data Management and Electronic Reporting: EPA has a national enforcement and compliance data system, the Integrated Compliance Information System (ICIS), which supports both the compliance monitoring and civil enforcement programs. As EPA's largest mission-focused data system, ICIS is a critical infrastructure tool used by the Agency, state, tribal, local and territorial governments, and the regulated community, to track compliance with and enforcement of all EPA statutes, which facilitates greater compliance and thus protection of human health and the environment. States are a major user of this resource. For instance, 21 state governments depend on ICIS to directly manage their clean water permitting and compliance activities. EPA utilizes ICIS enforcement and compliance data and other information technology tools to: (1) identify potential violations of the federal

environmental laws; (2) facilitate efficient enforcement; and (3) promote compliance with these requirements.

EPA also makes ICIS data available to the public via the internet-accessible Enforcement and Compliance History Online (ECHO) system. Using ICIS and ECHO to electronically track its civil enforcement work allows EPA to better ensure that its enforcement resources are used to facilitate transparency and address the most significant noncompliance problems, including noncompliance affecting overburdened, underserved, or vulnerable communities and noncompliance that leads to climate impacts. EPA collaborates with state, local, federal, tribal, and industry partners, through the E-Enterprise initiative, to leverage technologies such as in promoting electronic reporting and permitting. EPA and states implement the National Pollution Discharge Elimination System (NPDES) Electronic Reporting Rule through ICIS, one key tool for improving the availability of clean water compliance data to EPA, states, and the public.²²¹

- Support for the Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) Program: The Agency will continue to implement Phases 1 and 2 of the NPDES Electronic Reporting Rule which covers electronic permitting and compliance monitoring reporting and data sharing requirements for EPA and states. EPA will continue to work with states to ensure EPA has complete and high-quality permit, compliance, and enforcement data, and will evaluate and prioritize the development of additional electronic reporting tools that support states. EPA will continue to provide EPA and states with tools and support for tracking, interpreting, and reducing their NPDES noncompliance rate and will provide support to states in strengthening their NPDES compliance programs. In FY 2021, EPA reduced the percentage of permittees in significant noncompliance with their NPDES permits from a FY 2018 baseline of 20.3 percent to 12.6 percent.
- Compliance Monitoring Inspector Credential Policies and Training for EPA, State, Tribal and Local Governments: To ensure the quality of compliance monitoring activities, EPA develops national policies, updates inspection manuals, establishes training requirements for inspectors, and issues inspector credentials. EPA delivers critical in-person and online training courses to new and experienced federal, state, tribal and local inspectors to ensure the integrity of the national Compliance Monitoring Program, as well as other training for federal and state personnel on critical and emerging compliance issues. EPA hosts several in-person inspector training programs, such as the annual Clean Water Act NPDES Technical Inspector Workshop, the Public Water System Supervision (PWSS) Inspector Training Program, and the Federal Insecticide, Fungicide, and Rodenticide Act Pesticide Inspector Residential Training Program.
- Compliance Assistance: Compliance assistance is a valuable tool to assist regulated facilities in understanding their compliance obligations and achieving and maintaining compliance. EPA provides compliance assistance by working with third-party organizations and federal agencies to support 17 web-based, sector-specific compliance assistance centers and other web-based assistance resources. In addition, the Enforcement and Compliance Assurance Program develops webinars, Compliance Advisories, and other assistance materials to help EPA, and state regulators and the regulated community understand compliance rules and

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²²¹ For more information, please see: https://www.epa.gov/compliance/npdes-ereporting.

obligations. EPA also provides facility specific technical assistance to regulated entities such as the CWA and Safe Drinking Water Act (SDWA) regulated entities under the Compliance Advisor Program discussed in greater detail below.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Detect Violations and Promote Compliance in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Agency requests an additional \$42.3 million and 9.5 FTE to modernize our national enforcement and compliance data system and to expand compliance monitoring efforts to address environmental justice issues (including the Compliance Advisor Program and inspection program), Smart Tools for inspectors, implementation of the Evidence Act, per- and polyfluoroalkyl substances (PFAS), and climate change concerns including reduction in the use of hydrofluorocarbons (HFCs). EPA will continue to implement its comprehensive action plan for integrating environmental justice (EJ) and climate change considerations throughout all aspects of the Program, including the addition of a performance measure tracking the percentage of inspections affecting communities with potential EJ concerns. This effort answers the President's call to "strengthen enforcement of environmental violations with disproportionate impact on overburdened or underserved communities through the Office of Enforcement and Compliance Assurance" (EO 14008, sec. 222(b)(i)), and to "combat the climate crisis with bold, progressive action" (EO 14008, sec. 201). 222 This work includes, but is not limited to, multi-state/multiregional matters, issues of national significance, and emergency situations. In addition, EPA also will provide some targeted oversight and support to state, local, and tribal programs. To accomplish this objective, the Agency will prioritize work with states to develop methods that successfully leverage advances in both monitoring and information technology. The Agency also will maintain accessibility to ICIS for EPA, states, and tribes.

EPA will continue the data system modernization effort to better support states, tribes, and local governments and the public's need for information with modernized technology and implement EPA's enterprise-wide Digital Strategy with shared IT services. Modernization will facilitate EPA's efforts to better target noncompliance that impacts overburdened, underserved, or vulnerable communities and will increase the availability of information about environmental conditions in those communities and elsewhere.

In FY 2023, EPA will continue its efforts to modernize ICIS and support better integration with the public ECHO database. As a result of this data integration, EPA will be in a better position to focus compliance monitoring resources on areas of highest human and environmental risk, increase transparency to the public and improve data quality. EPA also will continue to improve ICIS and ECHO which will facilitate better access of compliance data and community information (e.g., from EPA's EJ screening tool) to EPA and states and to the public.

²²² For additional information on the Executive Order on *Tackling the Climate Crisis at Home and Abroad*, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

In FY 2023, EPA also will continue to expand software solutions for field inspectors to improve the effectiveness and efficiency of compliance inspections conducted by EPA and authorized states. Beginning in FY 2020, EPA has rolled out its Smart Tools for inspectors in the Resource Conservation and Recovery Act (RCRA) Hazardous Waste Program and the NPDES Program. Smart Tools software makes the process of documenting field inspections and preparing inspection reports more efficient. This tool allows EPA to use its compliance monitoring resources more efficiently, including monitoring for noncompliance, which affect overburdened, underserved, or vulnerable communities, or which may have climate impacts. It also allows EPA to make inspection reports more readily and timely available to the regulated entity and to the public in affected communities. Work on design and development of software for additional inspection programs will continue through FY 2022 and beyond (e.g., Underground Storage Tanks, Clean Air Act, Toxic Substances Control Act, Federal Insecticide, Fungicide, and Rodenticide Act).

Additional funding will further allow EPA to increase its implementation of the Evidence Act²²³ through the "Drinking Water Systems Out of Compliance" priority area in EPA's Learning Agenda. Safe drinking water is critical to the health of communities and each year, thousands of community water systems violate one or more health-based drinking water standards. Drinking water noncompliance is greatest in small, under-resourced communities and may be higher than EPA data suggests due to failures to monitor and report. In FY 2023, EPA will continue to collect new information and conduct studies under this learning priority area to develop statistically valid data to identify effective policy instruments. Additional resources will allow for the involvement of more state partners in assessing drinking water data to determine how accurately the data measures national compliance and substantiates EPA policy decisions. EPA will evaluate other questions on noncompliance root causes and corresponding factors and the efficacy of technical assistance, enforcement, and state oversight. EPA also will conduct an analysis to identify metrics of system technical, managerial, and financial capacity for early identification of at-risk drinking water systems. The analysis will test existing and new predictive analytic tools designed to identify at-risk systems. EPA will continue to reach out to and work with states, tribes, and academic experts to implement OECA's compliance learning agenda. The compliance learning agenda will improve the effectiveness of enforcement and compliance programs, approaches and tools by: prioritizing the most pressing programmatic questions; planning evidence-based studies to address these questions; and identifying effective and innovative approaches for improving compliance.

In FY 2023, EPA will continue the Agency's Compliance Advisor Program (formerly known as OECA's "Circuit Rider Program"), which reduces noncompliance at small public water systems (PWSs) and small wastewater treatment facilities (WWTFs) by providing hands-on technical assistance. Many small drinking water and wastewater systems are under-resourced or are in overburdened or underserved communities and are unable to achieve and maintain compliance due to lack of technical, managerial, and financial capacity. These communities are impacted by factors such as aging infrastructure, workforce shortages, and declining rate bases. These challenges are the root cause of most violations of the SDWA and CWA. Part trainer and part consultant, Compliance Advisors troubleshoot issues, develop plans to return systems to compliance, and increase the technical capacity of operators. The Compliance Advisors may revisit systems as needed, promoting sustainable compliance.

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²²³ Foundations for Evidence-Based Policymaking Act (Public Law 115–435).

To date, Compliance Advisors have provided technical assistance to approximately 165 small PWSs and 68 WWTFs in under-resourced communities nationwide, across all Regions – covering 21 states, Puerto Rico, and seven tribes. An increase of approximately \$2 million plus 1 FTE will allow Compliance Advisors to provide much needed assistance for up to 100 new systems. There are hundreds more small systems and facilities that need technical support to help them achieve and stay in compliance and provide clean and safe water to the communities they serve. In general, the systems supported by the Compliance Advisor Program are small (serving populations of less than 10,000). Over 90 percent are in overburdened, underserved, or vulnerable communities. As of early 2022, Compliance Advisors have delivered approximately 100 Recommendations Reports to small drinking water and wastewater systems, and have provided more than 300 standard operating procedures, checklists, and other tools to help these small systems return to sustained compliance. Tribes, who are often small or isolated, also will be offered additional multimedia assistance with respect to underground injection wells, underground storage tanks, and other programs as appropriate. There is significant demand for assistance that is targeted where existing technical support efforts cannot meet the needs of the community. The Compliance Advisor Program supplements other technical assistance efforts across the Agency. As funds are available, the Regions are requested to work with their states to identify and nominate systems to receive Compliance Advisor help returning to and sustaining compliance.

In FY 2023, EPA will continue to utilize its Mission Contract to support inspections in all Regions and to fund compliance monitoring efforts that support development of hydrofluorocarbon (HFC) cases. Compliance monitoring funds will advance protection of communities by increasing inspections and compliance assistance to ensure nearby facilities are adhering to regulations designed to protect vulnerable populations, as well as creating and expanding programs to further environmental protections and increase monitoring capability.

The investment in resources will support enforcement and compliance inspections adhering to Clean Air Act requirements for motor vehicles, engines and fuels, stationary sources, chemical accident prevention, wood heaters, and stratospheric ozone; Clean Water Act requirements for preventing and addressing oil spills and spills of sewage or other hazardous substances, wetlands protection, and biosolids use and disposal; Toxic Substance Control Act requirements for new and existing chemicals, lead based paint and polychlorinated biphenyls (PCBs); Federal Insecticide, Fungicide, and Rodenticide Act requirements for pesticide registration; and Emergency Planning and Community Right to Know Act requirements for emergency planning; Toxics Release Inventory reporting; American Innovation and Manufacturing (AIM) Act requirements for HFC reductions; and for Resource Conservation and Recovery Act requirements for hazardous and non-hazardous solid waste.

In FY 2023, EPA will continue the Agency's efforts to develop actions to address PFAS. PFAS is an urgent public health and environmental threat facing communities across the United States, with significant equity and EJ implications. While these compounds have for decades played an important role to many areas of society, the Nation is now realizing the potential adverse efforts of their widespread use. Today, PFAS have been found in surface water, groundwater, soil, and air across the country – from remote rural areas to densely-populated urban centers. Adverse health effects from PFAS contamination may most strongly threaten vulnerable populations (including pregnant women, children, and the elderly).

This proposed increase of approximately \$3 million in funding will support EPA's PFAS Strategic Roadmap. EPA will utilize these resources to investigate and identify releases of PFAS to the air, land, and water by actively investigating under RCRA, Toxic Substances Control Act (TSCA), CWA, SDWA, and CAA at the yet-unknown number of processing facilities and waste disposal facilities where PFAS are suspected of contaminating various environmental media. Funds will support case development and issuance of information requests, including the potential identification of imminent and substantial endangerment issues under CWA, SDWA, or RCRA. These resources also will assist dispute resolution and case development against federal agencies responsible for PFAS contamination. Funds will be used to continue operation and development of the PFAS Analytic Tools, a data integration platform currently used by EPA and states to analyze national PFAS data sets. The funding will provide enhancements including making the information more available to the public, including communities with EJ concerns.

Performance Measure Targets:

(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.	FY 2022 Target	FY 2023 Target
	10,000	10,000
(PM 444) Percentage of EPA inspection reports sent to the facility within 70	FY 2022	FY 2023
days of inspection.	Target	Target
	75	75
(PM 450) Percentage of EPA inspections at facilities affecting communities	FY 2022	FY 2023
with potential environmental justice concerns.	Target	Target
	45	50

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$3,447.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$22,854.0 / +5.0 FTE) This program increase will allow EPA to accelerate the modernization of the Integrated Compliance Information System and enhance its integration with the Enforcement and Compliance History Online family of internet-based services. The increased resources will fund adjustments to ICIS and ECHO that will facilitate better access of compliance data and community information, for instance to EPA's EJSCREEN tool and to other Federal systems like the Climate and Economic Justice Screening Tool) to EPA and states and to the public. This modernization will enhance EPA's efforts to address compliance concerns in overburdened, underserved, or vulnerable communities. This investment includes \$854.0 thousand in payroll.
- (+\$6,391.0 / +2.0 FTE) This program increase will allow the Compliance Advisor Program to provide critical technical assistance to an additional 80-100 systems to achieve and maintain compliance. Funding also will be used to support inspections and case development in the Regions. Funds may be used to support underserved communities

identified by the Regions and states as having concerns because of lead Action Level exceedances. This investment includes \$342.0 thousand in payroll.

- (+\$1,071.0 / +2.0 FTE) This program increase will allow EPA to evaluate priority questions in the Drinking Water Learning Agenda, developed under the Evidence Act, and thereby test the efficacy of policies to address drinking water noncompliance. The increase also will allow EPA to conduct studies with broader participation (such as involving the states) to test the effectiveness of inspection and enforcement approaches to improve compliance in the drinking water program. This investment includes \$342.0 thousand in payroll.
- (+\$116.0 / +0.5 FTE) This program increase will allow EPA to fund required collaborative enforcement and compliance assurance efforts (assistance, targeting, monitoring, strategic planning, and enforcement) under development pursuant to the AIM Act to facilitate the next phasedown stages, for HFCs. This investment includes \$85.0 thousand in payroll.
- (+\$3,415.0) This program increase will build capacity for the inspection program, case development and provide increased training to staff to conduct inspections and perform other compliance monitoring activities at Headquarters and the Regions. This funding will enhance EPA's compliance monitoring programmatic capabilities to enhance efforts to address pollution in overburdened and vulnerable communities.
- (+\$2,976.0) This program increase will allow EPA to investigate and identify releases of PFAS to the air, land, and water by actively investigating under RCRA, TSCA, CWA, SDWA, and CAA at the yet-unknown number of processing facilities and waste disposal facilities where PFAS are suspected of contaminating various environmental media. In addition, these funds will allow EPA to continue operation and development of the PFAS Analytic Tools, a data integration platform currently used by EPA and states to analyze national PFAS data sets.
- (+\$2,000.0) This program increase will allow EPA to advance work on the Smart Tools for Field Inspectors to increase the efficiency of inspections and help develop the tool for some of the smaller programs that have more of a direct impact for communities with EJ concerns such as the TSCA lead-based paint programs.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Act to Prevent Pollution from Ships (MARPOL Annex VI); American Innovation and Manufacturing Act: Clean Air Act; Clean Water Act; Emergency Planning and Community Right-to-Know Act; Federal Insecticide, Fungicide, and Rodenticide Act; Marine Protection, Research, and Sanctuaries Act; Oil Pollution Act; Resource Conservation and Recovery Act; Rivers and Harbors Act; Safe Drinking Water Act; Toxic Substances Control Act.

Enforcement

Civil Enforcement

Program Area: Enforcement Goal: Enforce Environmental Laws and Ensure Compliance Objective(s): Hold Environmental Violators and Responsible Parties Accountable

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$164,888	\$168,341	\$210,011	\$41,670
Leaking Underground Storage Tanks	\$625	\$620	\$653	\$33
Inland Oil Spill Programs	\$2,532	\$2,413	\$2,538	\$125
Total Budget Authority	\$168,045	\$171,374	\$213,202	\$41,828
Total Workyears	908.0	916.2	1,004.2	88.0

Program Project Description:

The overall goal of EPA's Civil Enforcement Program is to protect human health and the environment by ensuring compliance with the Nation's environmental laws and regulations. The Civil Enforcement Program works in partnership with its state, local, tribal, and territorial regulatory partners to encourage compliance, compel regulated entities to correct and/or mitigate violations, and to assess appropriate penalties for violations, including removing any economic benefit that a violator gained from noncompliance.

The Civil Enforcement Program works closely with the U.S. Department of Justice, state and local governments, tribal governments, territories, and other federal agencies to ensure consistent and fair enforcement of all major environmental statutes and numerous regulations implementing each of those statutes. Millions of regulated public, federal, and private entities are subject to one or more of these statutory requirements. The Civil Enforcement Program develops, litigates, and settles administrative and civil judicial cases against violators of environmental laws. In FY 2021, because of EPA civil enforcement actions, approximately 285 million pounds of air, water, and toxic pollutants were reduced, treated, or eliminated, and approximately 7.6 billion pounds of hazardous and non-hazardous waste were treated, minimized, or properly disposed.²²⁴

EPA is responsible for direct implementation of programs that are not delegable or where a state or tribe has not sought or obtained the authority to implement a program (or program component). Examples of programs that are not delegable include the Clean Air Act (CAA) mobile source and Ozone Depleting Substances programs; pesticide labeling and registration under the Federal Insecticide, Fungicide, and Rodenticide Act; the new and existing chemicals program under the Toxic Substances Control Act (TSCA); and enforcement in Indian Country (except where the program has been delegated to the tribe). Many statutes have programs or regulations that states have not obtained authority to implement, including the American Innovation and Manufacturing

²²⁴ For additional information on EPA's FY 2021 enforcement and compliance assurance program results, please see: https://www.epa.gov/enforcement/enforcement-annual-results-fiscal-year-2021.

Act, as well as portions of the Resource Conservation and Recovery Act (RCRA), the Clean Water Act (CWA), the Safe Drinking Water Act (SDWA), TSCA (lead-based paint program), and the CAA (chemical accident prevention).

EPA works with authorized states and tribes to ensure a level playing field and assists states and tribes in their implementation of delegated/authorized programs when needed, such as in cases where the Agency maintains a unique expertise or capability. The Agency also carries out its statutory oversight responsibilities to ensure states and tribes are meeting national compliance monitoring standards and taking timely and appropriate actions to return facilities to compliance. Our work to protect communities with environmental justice (EJ) concerns is a shared goal and responsibility of EPA and our partner agencies.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Hold Environmental Violators and Responsible Parties Accountable in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Agency requests an investment of 88 FTE and approximately \$41.7 million to expand civil enforcement efforts to address EJ issues (including protection of fenceline communities); climate change concerns (including a reduction in the use of hydrofluorocarbons (HFCs); and methane emissions from oil and gas facilities and landfills); per- and poly-fluoroalkyl substances (PFAS); and coal combustion wastes. In addition, EPA will continue to focus efforts toward areas where EPA's enforcement actions can have the most substantial impacts on human health and the environment. EPA will continue to focus its resources on the six current national compliance initiatives (seeking to improve air quality, provide for clean and safe water, and ensure chemical safety); ²²⁵ the enforcement of rules to prevent exposure to lead; and attention to emerging contaminants, like PFAS.

In FY 2023, EPA proposes to increase protection of fenceline communities at risk from cumulative impacts of large chemical manufacturing facilities, petrochemical operations, and refineries. Through coordinated assessment of noncompliance in multiple statutory areas, EPA's Civil Enforcement Program will plan inspections, case development, and enforcement actions to integrate RCRA, CWA, SDWA, CAA (including 112r), TSCA and EPCRA to ensure comprehensive compliance with environmental regulations, thereby reducing risk to human health and the environment by decreasing the likelihood of excess emissions, releases, and discharges.

In FY 2023, EPA will continue to integrate EJ and climate (including HFCs) considerations throughout all aspects of EPA's Civil Enforcement Program (e.g., private parties, public and federal facilities) in headquarters and across EPA's 10 regional offices. This work will answer the President's call to "strengthen enforcement of environmental violations with disproportionate impact on underserved communities through the Office of Enforcement and Compliance Assurance" (EO 14008, sec. 222(b)(i)), and to "combat the climate crisis with bold, progressive

²²⁵ For additional information, please see: https://www.epa.gov/enforcement/national-compliance-initiatives.

action" (EO 14008, sec. 201).²²⁶ EPA will focus on strengthening enforcement and resolving environmental noncompliance through remedies with tangible benefits for the impacted community by preventing further pollution due to noncompliance; mitigating past impacts from pollution; securing penalties to recapture economic benefit of noncompliance and deter future violations; seeking early and innovative relief (*e.g.*, fenceline monitoring and transparency tools); and, incorporating Supplemental Environmental Projects (SEPs) in settlements, where appropriate and to the extent permitted by law and policy.

In FY 2023, EPA will continue to incorporate EJ and climate change considerations into case development while pursuing enforcement and compliance assurance work, including by increasing climate and EJ-focused inspections and community outreach, considering climate and EJ factors in case-selection (e.g., to emphasize areas where greenhouse gas emission can be reduced while providing benefits in underserved communities, such as reducing air emissions from landfills), and expanding inclusion of mitigation and resilience remedies in case resolutions. In addition, EPA will ensure that the increasing number of rules addressing climate change and affecting communities with EJ concerns, as well as permit-related provisions, are enforceable and implementable. EPA also will expand databases to track climate and EJ enforcement activities, enhance or create networks of staff focused on advancing the Administration's climate and EJ goals, and develop and provide comprehensive and ongoing training on climate and EJ issues to equip staff for future challenges. A particular area of EPA's climate change effort will be the work of the Interagency HFC Task Force, which was established to ensure compliance with the American Innovation and Manufacturing (AIM) Act. The task force will identify, intercept, and interdict illegal HFC imports (potent greenhouse gases), share data to support allowances, train customs officers and enforcement personnel, and address common HFC import experiences with other countries. EPA will vigorously enforce its regulations to prevent and deter illegal importation of HFCs. Additionally, EPA will continue its strong emphasis on identifying and resolving Clean Air Act noncompliance in the oil and gas sector and requiring compliance with the Renewable Fuel Standard regulations.

In FY 2023, EPA will utilize these resources to investigate and identify releases of PFAS to the air, land, and water by actively investigating under RCRA, TSCA, CWA, SDWA, and CAA at the yet-unknown number of processing facilities and waste disposal facilities where PFAS are suspected of contaminating various environmental media. PFAS is an urgent public health and environmental threat facing communities across the United States, with significant equity and EJ implications. EPA will continue to investigate releases, address imminent and substantial endangerment situations, and prevent exposure to PFAS, under multiple environmental statutes.

In FY 2023, new statutory and regulatory requirements will mean an increased need to evaluate and address noncompliance with these rules. In addition, the Agency will continue to use some of its funding to cover enforcement of the Coal Combustion Residuals (CCR) Rule. EPA's review of publicly posted CCR Rule compliance information already suggests widespread noncompliance with CCR regulations. In enforcing the CCR Rule, coal ash units would be made more resilient to extreme weather events and contamination in communities near CCR units would be reduced.

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²²⁶ For additional information on the Executive Order on *Tackling the Climate Crisis at Home and Abroad*, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

EPA expects that the six current national initiatives can have a significant impact on protecting the health of communities with potential EJ concerns and addressing climate change.

- Creating Cleaner Air for Communities focuses on noncompliance that results in excess emissions of either volatile organic compounds or hazardous air pollutants, especially where emissions may adversely affect an area's attainment of National Ambient Air Quality Standards or may adversely affect vulnerable populations.
- Stopping Aftermarket Defeat Devices for Vehicles and Engines focuses on stopping the manufacture, sale, and installation of devices on vehicles and engines that defeat emissions controls, which contribute excess pollution, harming public health and air quality.
- Reducing Hazardous Air Emissions from Hazardous Waste Facilities focuses on improving compliance with RCRA regulations that require the control of organic air emissions from certain hazardous waste management units and activities.
- Reducing Risks of Accidental Releases at Industrial and Chemical Facilities focuses on decreasing the likelihood of chemical accidents, thereby reducing risk to communities.
- Reducing Significant Non-Compliance with National Pollutant Discharge Elimination System (NPDES) Permits focuses on improving compliance rates with NPDES permits and ensuring the worst violations are timely and appropriately addressed.
- Reducing Non-Compliance with Drinking Water Standards at Community Water Systems

 focuses on ensuring safe and clean drinking water from regulated community drinking water systems.

Performance Measure Targets:

(PM 434) Millions of pounds of pollutants and waste reduced, treated, or eliminated through concluded enforcement actions.	FY 2022 Target	FY 2023 Target
	325	325
(PM 436) Number of open civil judicial cases more than 2.5 years old	FY 2022	FY 2023
without a complaint filed.	Target	Target
	99	96
(PM 446) Quarterly percentage of Clean Water Act National Pollutant	FY 2022	FY 2023
Discharge Elimination System (NPDES) permittees in significant	Target	Target
noncompliance with their permit limits.	10.1	10.1

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$6,907.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$24,696.0 / +49.0 FTE) This program change will support increased focus on EJ and climate change by developing and implementing a comprehensive action plan for integrating climate and EJ considerations throughout all aspects of EPA's Civil Enforcement Program (e.g., private parties and federal facilities) in headquarters and across EPA's 10 regional offices. This investment includes \$8.7 million in payroll.

- (+\$7,005.0 / +28.0 FTE) This program increase will allow EPA to address noncompliance with the CCR rule. Through enforcement, EPA will ensure that required corrective actions are taken at facilities nationwide and pursue enforcement in a sector that has shown widespread non-compliance. The Program will use these resources to enforce the regulatory requirements at noncomplying facilities thereby addressing the risks posed by CCR unlined impoundments and landfills, including risks to ecological and residential receptors, notably drinking water sources and nearby communities. This investment includes \$5.0 million in payroll.
- (+\$1,998.0 / +5.8 FTE) This program increase will allow EPA to expand the work of the Interagency HFC Task Force, which is focused on ensuring compliance with the AIM Act. The task force will identify, intercept, and interdict illegal HFC imports, share data to support allowances, train customs officers and enforcement personnel, and address common HFC import experiences with other countries. EPA also will need to implement new HFC allowance modules and expand its ozone depleting substances (ODS) tracking system to assess ongoing compliance. This investment includes \$1.0 million in payroll.
- (+\$646.0 / +3.0 FTE) This program increase will allow EPA to expand protection for fenceline communities via increased monitoring, inspections, community outreach, compliance assistance and enforcement to ensure facilities have measures in place to prevent oil discharges and chemical accidents, including those that result from extreme weather events (e.g., flooding). This investment includes \$536.0 thousand in payroll.
- (+\$418.0 / +2.2 FTE) This program increase will allow EPA to identify releases of PFAS to the air, land, and water by actively investigating and pursuing civil enforcement to address endangerments and prevent exposure under RCRA, TSCA, CWA, SDWA, and CAA, at the yet-unknown number of processing facilities and waste disposal facilities where PFAS are suspected of contaminating various environmental media. This investment includes \$393.0 thousand in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Act to Prevent Pollution from Ships (MARPOL Annex VI); American Innovation and Manufacturing Act; Clean Air Act; Clean Water Act; Emergency Planning and Community Right-to-Know Act; Federal Insecticide, Fungicide, and Rodenticide Act; Marine Protection, Research, and Sanctuaries Act; Oil Pollution Act; Resource Conservation and Recovery Act; Safe Drinking Water Act; and Toxic Substances Control Act.

Criminal Enforcement

Program Area: Enforcement

Goal: Enforce Environmental Laws and Ensure Compliance Objective(s): Hold Environmental Violators and Responsible Parties Accountable

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$49,588	\$51,275	\$61,411	\$10,136
Hazardous Substance Superfund	\$8,469	\$7,647	\$8,088	\$441
Total Budget Authority	\$58,057	\$58,922	\$69,499	\$10,577
Total Workyears	238.6	257.7	291.0	33.3

Program Project Description:

EPA's Criminal Enforcement Program enforces the Nation's environmental laws through targeted investigation of criminal conduct, committed by individual and corporate defendants, that threatens public health and the environment. EPA's criminal enforcement agents (Special Agents) investigate violations of environmental statutes and associated violations of Title 18 of the United States Code such as fraud, conspiracy, false statements, and obstruction of justice.

The Criminal Enforcement Program specifically collaborates with other EPA offices, the Environmental Justice (EJ) Program, and the U.S. Department of Justice (DOJ) to ensure that our enforcement and compliance assurance work addresses the impacts of illegal environmental pollution activities on overburdened communities and to expand outreach opportunities through those offices.

Criminal Enforcement Special Agents are assisted in the Criminal Enforcement Program by forensic scientists, attorneys, technicians, engineers, and other experts. EPA's criminal enforcement attorneys provide legal and policy support for all the Program's responsibilities, including forensics and expert witness preparation, to ensure that program activities are carried out in accordance with legal requirements and the policies of the Agency. These efforts support environmental crime prosecutions primarily by the U.S. Attorneys and the DOJ's Environmental Crimes Section. In FY 2021, the conviction rate for criminal defendants charged as a result of EPA criminal enforcement investigations was 96 percent, with a total of twenty-eight years of incarceration for defendants sentenced in criminal enforcement investigations.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Hold Environmental Violators and Responsible Parties Accountable in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Agency requests an additional \$10.1 million and 33.1 FTE to expand EPA's capacity for criminal enforcement and work to support the criminal program, with an emphasis in

several priority areas, including communities with EJ concerns and to combat climate change. This FTE increase will assist the EPA in rebuilding its Criminal Enforcement Agent workforce, working towards the goal of 200 Special Agents stipulated in the Pollution Prosecution Act of 1990.

In FY 2023, EPA will continue to focus on the most egregious cases (e.g., significant human health, environmental, and deterrent impacts), while balancing its overall case load across all environmental statutes. Program goals and priorities include the following:

- In FY 2023, EPA will continue to prioritize criminal enforcement resources for investigations which involve vulnerable communities or those that have historically been overburdened by pollution. This effort has been focused as a Criminal Enforcement Program Initiative with an emphasis on addressing environmental crime and crime victims in these areas. The Criminal Investigation Division (CID) works with partners at the DOJ to jointly prosecute wrongdoing and reduce the impact pollution has on these areas through investigation, judicial actions, and settlements while maintaining case initiation standards and reducing the impact of pollution.
- In FY 2023, EPA's Environmental Crime Victim Witness Assistance Program will closely align its implementation of the Criminal Victims' Rights Act and the Victims' Rights and Restitution Act with EPA's EJ work. Activities will include data mining and mapping to identify where communities with EJ concerns, crime victims, and public health impacts overlap. This strategy will aid the Program in identifying sources of pollution impacting these communities and to focus criminal enforcement resources on the Nation's most overburdened, underserved, or vulnerable populations and, where appropriate, use of crime victim program resources and emergency funds to assist individuals in such communities.
- In FY 2023, the Criminal Enforcement Program will continue implementing its responsibilities as a part of the HFC (Hydrofluorocarbons) Enforcement Task Force, working with OAR and the Department of Homeland Security to ensure U.S. compliance with the American Innovation and Manufacturing (AIM) Act. The Task Force will continue to identify, intercept, and interdict illegal HFC imports, share data to support allowances, train customs officers and enforcement personnel, and address common HFC import experiences with other countries. EPA will need to continue standing up its new enforcement and compliance regime. EPA would leverage our experience working with Customs and Border Protection (CBP), DOJ and other federal partners to successfully enforce federal laws related to HFCs. Critically important to success in this media, are dedicated analysts in the Criminal Enforcement Program to research, assess and coordinate with federal partners, private industry, and task force members.
- In addition, in FY 2023 the Criminal Enforcement Program will continue to work with Interpol and other federal partners to combat climate change through domestic and international law enforcement collaboration. This work will include formalized information sharing related to preventing illegal importation of prohibited products that contribute to global climate instability and capacity building with other countries.

• In FY 2023, the Criminal Enforcement Program also will increase its collaboration and coordination with the Civil Enforcement Program to ensure that EPA's Enforcement Program identifies the most egregious cases and responds to them effectively and efficiently, to ensure compliance and defer future conduct. The Agency will continue to investigate violations of environmental statutes and associated violations of Title 18 of the United States Code to protect public health and the environment.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$2,536.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$7,120.0 / +32.0 FTE) This program increase supports expanding EPA's capacity for criminal enforcement, the expansion of the enforcement in communities with EJ concerns, enforcement of climate-related regulations, and increased polluter accountability. This investment includes \$6.91 million in payroll.
- (+\$480.0/+1.1 FTE) This program increase will ensure EPA has the capacity and technical expertise to investigate, analyze, sample, test, and transport HFCs. The increase in FTE will allow analysts to research, assess, and coordinate with federal partners, private industry, and task force members. This investment includes \$237.0 thousand in payroll.

Statutory Authority:

Title 18 of the U.S.C.; 18 U.S.C. § 3063; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Resource Conservation and Recovery Act; Clean Water Act; Safe Drinking Water Act; Clean Air Act; Toxic Substances Control Act; Emergency Planning and Community Right-To-Know Act; Federal Insecticide, Fungicide, and Rodenticide Act; Ocean Dumping Act; Rivers and Harbors Act; Pollution Prosecution Act of 1990; American Innovation and Manufacturing Act.

NEPA Implementation

Program Area: Enforcement

Goal: Enforce Environmental Laws and Ensure Compliance Objective(s): Detect Violations and Promote Compliance

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$15,809	\$16,943	\$19,883	\$2,940
Total Budget Authority	\$15,809	\$16,943	\$19,883	\$2,940
Total Workyears	96.4	89.9	90.9	1.0

Program Project Description:

EPA's National Environmental Policy Act (NEPA) Implementation Program implements the environmental requirements of NEPA and Section 309 of the Clean Air Act (CAA) to review other federal agency environmental impact statements (EIS) and other federal agencies' NEPA regulations. In addition, EPA's NEPA Implementation Program manages e-NEPA, a web-based application that serves as the official EIS filing system and clearinghouse for all federal EISs on behalf of the Council on Environmental Quality (CEQ) in accordance with a Memorandum of Understanding (MOU) with CEQ.²²⁷ The Program also oversees EPA's actions subject to NEPA (40 CFR Part 6) and reviews of EISs for non-governmental activities in Antarctica (40 CFR Part 8). Under the CAA §309 Program, EPA's focus on early engagement with other federal agencies is consistent with NEPA planning principles and improves identification of potential issues and solutions early in the planning process to reduce impacts and improve environmental outcomes. EPA also assists agencies in the analyses of potential impacts related to climate change, including impacts from greenhouse gas (GHG) emissions, and potential impacts to communities with environmental justice (EJ) concerns.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Detect Violations and Promote Compliance in the FY 2022 - 2026 EPA Strategic Plan.

EPA is pursuing a multi-year process of reconstructing the NEPA Program to both build basic capacities and inject significantly more robust considerations of climate change mitigation and adaptation, as well as EJ, across the Agency's NEPA practitioner community and into the reviews of every qualifying federal action and federal EIS. Contract support for non-inherently governmental functions coupled with review process efficiencies will assist in meeting current requirements to analyze and identify potential impacts of planned actions across the Federal government. Accordingly, this increase in FY 2023 resources will assist the Agency in fulfilling

²²⁷ Memorandum of Agreement No. 1 Between the Council on Environmental Quality and the Environmental Protection Agency, October 1977.

its current statutory obligation to review and comment on every federal agency EIS in advance of contemplated outyear FTE restoration requests.

EPA will continue to focus its reviews on areas where the Agency has statutory authority and subject matter expertise. EPA will continue to work with the Office of Management and Budget (OMB), CEQ, and other federal agencies to evaluate ways to coordinate, streamline, and improve the NEPA process, as well as to incorporate robust science-based analyses of project-related impacts and potential measures to minimize and mitigate those impacts. In FY 2023 and subsequent budget years, as a result of the American Rescue Plan Act of 2021 (P.L. 117-2), ²²⁸ the Infrastructure Investment and Jobs Act (IIJA) and other economic recovery actions, federal agencies expect a substantial increase in funded actions which will likely require EISs and EPA environmental review. In addition, due to policies and initiatives such as EO 14017 *America's Supply Chains* and the Bureau of Land Management and EPA Energy Act MOU, EPA anticipates a substantial increase in priority actions requiring expedited reviews. Critical minerals mining projects are expected to trigger EISs and will require special expertise at EPA to facilitate timely inter-agency coordination on environmental reviews and permitting actions. EPA anticipates that the existing workload will likely double based on interagency discussions hosted by CEQ and OMB.

Drawing from experiences with FAST-41 and other priority initiatives, EPA's early engagement with lead federal agencies at the beginning of the NEPA scoping process improves the quality of EISs and minimizes delays. However, this early engagement will require substantially more staff time throughout the NEPA process.

Updates to the NEPA regulations (40 CFR Parts 1500-1518) and other related federal regulations may substantively impact the number or scope of environmental reviews. EPA regularly supports and assists CEQ in the development of guidance through the 1977 EPA and CEQ MOU. In FY 2023, the NEPA Implementation Program will continue to develop updated guidance, tools, and resources to assist federal agencies and CAA §309 reviewers in transparent, consistent, and high-quality identification and disclosure of opportunities to avoid, minimize, and mitigate impacts to communities with EJ concerns; reduce impacts of GHG emissions in all major sectors; and identify and develop climate-resilient alternatives. This will include identifying opportunities to update EPA's topic specific technical tools for NEPA reviews that are regularly used by multiple agencies; ²³⁰ improve and enhance the NEPAssist application to incorporate tools and/or additional layers of data or information, as needed, such as an enhanced interface between NEPAssist and EJSCREEN updates. It also will include identifying other tools and support resources as CEQ updates guidance and provides direction with respect to climate and EJ screening tools.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

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²²⁸ For additional information, please refer to: https://www.congress.gov/117/bills/hr1319/BILLS-117hr1319enr.pdf.

²²⁹ For additional information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/02/24/eyecutive-order-on-americas-supply-chains/

actions/2021/02/24/executive-order-on-americas-supply-chains/.

230 For additional information, please refer to: https://www.epa.gov/nepa/national-environmental-policy-act-policies-and-guidance.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$830.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$400.0) This program increase is to embed climate change and EJ considerations within the EPA's environmental review process.
- (+\$1,710.0 / +1.0 FTE) This program change is to support the increase in environmental reviews of Federal EISs and to enhance the interface between the NEPAssist geospatial planning tool and EJSCREEN screening and mapping tool to ensure EJ impacts are considered by all Federal NEPA planners when using the tool. This investment includes \$176.0 thousand in payroll.

Statutory Authority:

National Environmental Policy Act (NEPA); Clean Air Act (CAA) § 309; Antarctic Science, Tourism, and Conservation Act; Clean Water Act § 511(c); Endangered Species Act; National Historic Preservation Act; Archaeological and Historic Preservation Act; Fishery Conservation and Management Act; Fish and Wildlife Coordination Act; and Title 41 of the Fixing America's Surface Transportation Act.

Environmental Justice

Environmental Justice

Program Area: Environmental Justice

Goal: Take Decisive Action to Advance Environmental Justice and Civil Rights Objective(s): Embed Environmental Justice and Civil Rights into EPA's Programs, Policies, and Activities

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$10,343	\$11,838	\$294,938	\$283,100
Hazardous Substance Superfund	\$681	\$826	\$5,876	\$5,050
Total Budget Authority	\$11,024	\$12,664	\$300,814	\$288,150
Total Workyears	34.7	39.9	211.9	172.0

Program Project Description:

EPA's Environmental Justice (EJ) Program coordinates the Agency's efforts to address the needs of overburdened and vulnerable communities by decreasing environmental burdens, increasing environmental benefits, and working collaboratively with all stakeholders to build healthy, sustainable communities based on residents' needs and desires. EPA's EJ Program focuses on collaboration as a central principle and method of advancing justice. The program provides grants, technical assistance, and expert consultative support to communities, partners at all levels of government, and other stakeholders such as academia, business, and industry to achieve protection from environmental and public health hazards for people of color, low-income communities, and indigenous communities.

Work in this program directly supports the FY 2022-2026 EPA Strategic Plan Goal 2, Take Decisive Action to Advance Environmental Justice and Civil Rights, and Administrator Michael Regan's message in the memo titled "Our Commitment to Environmental Justice" issued on April 7, 2021.²³¹ In addition, this work supports implementation of Executive Order (EO) 13985 Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, 232 and EO 14008 Tackling the Climate Crisis at Home and Abroad. 233 In accordance with the American's Water Infrastructure Act of 2018 (P.L. 115-270), every EPA regional office employs a dedicated EJ coordinator, and the Agency maintains a list of these persons on EPA's website. 234

²³¹ For additional information, please refer to: <a href="https://www.epa.gov/sites/default/files/2021-04/documents/regan-page-101/2021-04/20 messageoncommitmenttoenvironmentaljustice-april072021.pdf

²³² For additional information, please refer to: https://www.federalregister.gov/documents/2021/01/25/2021-01753/advancing-

racial-equity-and-support-for-underserved-communities-through-the-federal-government.

233 For additional information, please refer to: https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-

climate-crisis-at-home-and-abroad.

234 For additional information, please refer to: https://www.epa.gov/environmentaljustice/forms/contact-us-about-environmental- justice.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.2, Embed Environmental Justice and Civil Rights into EPA's Programs, Policies, and Activities in the FY 2022 - 2026 EPA Strategic Plan. Work in this program also directly supports progress toward the Agency Priority Goal: Deliver tools and metrics for EPA and its Tribal, state, local, and community partners to advance environmental justice and external civil rights compliance. By September 30, 2023, EPA will develop and implement a cumulative impacts framework, issue guidance on external civil rights compliance, establish at least 10 indicators to assess EPA's performance in eliminating disparities in environmental and public health conditions, and train staff and partners on how to use these resources.

In FY 2023, EPA requests an additional \$283.1 million and 170 FTE for the Environmental Justice Program in the EPM appropriation. This investment will allow the Agency to develop, manage, and award competitive grants to reduce the historically disproportionate health impacts of pollution in communities with EJ concerns as well as to increase support for existing grant projects. This investment also will support climate initiatives in communities with EJ concerns, as well as EJ training, education, and outreach programs. This investment will provide paramount support to community-based organizations, indigenous organizations, states, tribes, local governments, and territorial governments in pursuit of identifying and addressing EJ issues.

In FY 2023, EPA will continue to support the successful completion of grant projects funded in previous fiscal years while continuing to improve the delivery of grant investments to develop partnerships with community entities to improve the health outcomes of residents and workers in communities with EJ concerns. This investment will support climate initiatives in communities with EJ concerns as well as provide critical support to community-based organizations, indigenous organizations, states, tribes, local governments, territorial governments, and State and local EJ advisory councils, in pursuit of identifying and addressing EJ issues through multi-partner collaborations.

In FY 2023, the existing and new grant programs include:

- 1) a \$50 million Environmental Justice Competitive Grant Program (formerly named Environmental Justice Collaborative Problem-Solving Cooperative Agreements);
- 2) a \$25 million Environmental Justice Community Grants Program (formerly named Environmental Justice Small Grants) that would continue to competitively award a comprehensive suite of grants to non-profit, community-based organizations to reduce the disproportionate health impacts of environmental pollution in communities with EJ concerns;
- 3) a \$25 million Environmental Justice State Grant Program (formerly named State Environmental Justice Cooperative Agreements) that would continue funding for states, local governments, and territories;
- 4) a \$25 million Tribal Environmental Justice Grant Program (formerly named Tribal Environmental Justice Cooperative Agreements) to support work to eliminate disproportionately adverse human health or environmental effects in Tribal and Indigenous communities; and

5) a \$15 million competitive, community-based Participatory Research Grant Program to award competitive grants to higher education institutions that develop partnerships with community entities to improve the health outcomes of residents and workers in communities with EJ concerns.

EJ National Program

In FY 2023, EPA will continue to develop the EJ National Program to support the robust, consistent, and meaningful integration of EJ considerations across all EPA policies, programs, and activities in addition to providing much needed direct support to communities; partners at the state, tribal, and local levels; and other stakeholders, such as academia, business, and industry. The EJ National Program continues to provide essential support to other EPA programs working to consider environmental justice in environmental permitting, rulemaking, enforcement and compliance, emergency/disaster response and recovery, and climate change priorities. The EJ Program also continues to engage communities and provide tools, data, and methods to help other EPA programs analyze the EJ implications of policy decisions, such as through National Environmental Policy Act processes or the consideration of costs and benefits in economic analyses.

The FY 2023 investment also will provide EPA's regional offices with more capacity to integrate environmental justice across their programs and regularly engage with and support community and state, tribal, and local partners. Key activities to support EPA's ability to integrate EJ across all policies, programs, and activities are reflected in EPA's Agency Priority Goal (APG) related to EJ and civil rights compliance. Strategy 1 of this APG focuses on the development of a framework to consider cumulative impacts across the range of EPA's policies, programs, and activities, and Strategy 3 commits to development of 10 indicators for eliminating disparities in communities with EJ concerns. These are watershed commitments in EPA's three decades of EJ practice. EPA will initiate work on these strategies in FY 2022 and will prioritize completion by the APG's deadline at the end of FY 2023.

Engagement with Partners, Stakeholders, and Communities

EPA pursues a broad array of activities to support efforts by partners, stakeholders, and communities to advance environmental justice. For instance, the EJ Program hosts a series of training webinars focused on integrating EJ at all levels of government, with special focus on state agencies, tribal governments and indigenous populations, and territorial governments and insular areas such as Pacific Island Nations. During FY 2022, this included partnership with the Environmental Council of States to provide additional and more finely tailored resources to support state efforts to advance equity and justice in their agencies.

The EJ webinar series for tribes and indigenous peoples enhances EJ integration, builds capacity, raises awareness of EPA and other federal programs and resources, and provides technical assistance to tribes and indigenous peoples on priority environmental, public health, and other EJ concerns. This webinar series began in November 2020 and is planned to continue for the

foreseeable future.²³⁵ There have been 16 webinars, 10,395 registrants, and 3,948 participants. EPA also has offered two webinars to the Pacific Islands and their indigenous peoples to present information more specifically relevant to their concerns. The webinars have consistently received high ratings from the participants.

EPA also has hosted regular National EJ Community Engagement calls throughout FY 2021 and FY 2022 and will continue to do so in FY 2023. During this time, EPA has completed 14 such national engagement calls, eight of which focused on Justice40 and the six EPA Justice40 pilot programs. During the calls held from February 17, 2021, through February 22, 2022, approximately 6,300 participants engaged on a wide spectrum of topics related to EJ, the Justice40 Initiative, and EJ mapping and screening. Each call featured opportunities, such as expansive listening sessions, during which speakers interacted with comments and questions from participants. EPA also has hosted three public "office hours" for users of EJScreen to engage with the EPA EJScreen team with questions and feedback for further enhancements to the tool. EPA also continues to communicate through its email listsery and social media presence.

EPA also continues to directly engage community organizations and leaders while supporting internal EPA efforts to integrate EJ considerations into all EPA policies, programs, and activities. In the first five months of FY 2022, EPA's EJ Program executed more than 235 engagements and trainings inside of the Agency that reached more than 5,000 EPA staff. Additionally, the EJ Program completed more than 200 external engagements, collaborative initiatives, and trainings with and in support of community groups and other partners. The EJ Program also worked with an additional 94 partner organizations to directly engage and support over 4,000 community members.

In FY 2023, EPA will continue to develop education, training, and outreach resources associated with EJ, including 1) an EJ Training Program to increase the capacity of residents in communities with EJ concerns to identify and address negative impacts; 2) outreach centers in the EPA regional offices to work directly with communities with EJ concerns; and 3) an EJ Clearinghouse to serve as online resources for EJ information.

EJ Grants Program

EPA's FY 2021 EJ grants program saw a significant increase in the scope and level of funding due to additional Congressional resource allocation. EPA relaunched the State Environmental Justice Cooperative Agreement (SEJCA) Program. EPA made the SEJCA Program available to proposals from states, tribes, local governments, and territorial governments and emphasized projects focused on engaging and supporting community efforts in response to the COVID-19 pandemic. Over the course of FY 2021 and into FY 2022, EPA awarded an unprecedented \$18.4 million to 154 grant recipients through the EJ grants programs. This included:

- 21 SEJCA awards in fall 2021;
- 34 EJ Collaborative Problem Solving (EJCPS) awards;
- 99 EJ Small Grants selected in 2021 and awarded in winter/spring 2022;

²³⁵ For additional information, please refer to: https://www.epa.gov/environmentaljustice/environmental-justice-tribes-and-indigenous-peoples

²³⁶ For additional information, please refer to: https://www.epa.gov/environmentaljustice/community-outreach-and-engagement.

Of the total amount awarded, over \$13.5 million came from the American Rescue Plan (ARP) and approximately \$4.5 million from base EJ annual appropriations. Of the 154 projects funded, 128 received at least partial funding through the ARP, and 26 are receiving full funding through base EJ appropriations with additional funds from EPA's Office of Transportation and Air Quality to support specific projects focused on EJ and transportation/goods movement issues.

The EJ grants program funding priorities over this period included projects addressing public education, training, emergency planning, and/or investigations on impacts of COVID-19 on underserved communities in addition to projects addressing climate and disaster resiliency and emergency preparedness. For the first time ever, EPA's EJ Program created a set-aside exclusively for small nonprofit organizations (defined as organizations with 10 or fewer full-time employees) in an attempt to ensure the EJ funding reached lower-capacity and new organizations with capacity building needs. Of the proposals that received EJ Small Grant funding, 84 percent went to qualifying small nonprofits.

Interagency Coordination

In FY 2023, EPA will continue to support the efforts of the National Environmental Justice Advisory Council (NEJAC) in addition to supporting the efforts of the White House Environmental Justice Advisory Council (WHEJAC) established by EO 14008.²³⁷ EPA also will support the Council on Environmental Quality (CEQ) as it leads the Interagency Council on Environmental Justice as well as a suite of EPA bi- and multi-lateral initiatives to support and partner directly with other federal agencies.

EJScreen

In FY 2023, EPA will continue to support and improve our national EJ screening and mapping tool (EJScreen). Efforts will focus on identifying and adding valuable new data sources to the tool with a focus on climate-relevant data, in addition to enhancing user interface elements. EPA will enhance EJScreen based upon user requests and feedback – from both within EPA and from external users – to further inform equitable decision making across the federal government in addition to providing more robust and diverse data to effectively prioritize communities in need. These enhancements will enable EPA to further focus program design to benefit communities with EJ concerns and those most at risk of climate change. In addition, EPA's budget includes resources to update EPA's IT systems to provide ongoing support, maintenance, and development of the Climate and Economic Justice Screening Tool (CEJST), as outlined in EO 14008.

Performance Measure Targets:

(PM EJCR01) Percentage of EPA programs that seek feedback and comment from the public that provide capacity-building resources to communities with environmental justice concerns to support their ability to meaningfully engage and provide useful feedback to those programs.

FY 2022

Target

40

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²³⁷ For more information, please visit: https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad

(PM EJCR02) Percentage of EPA programs utilizing extramural vehicles to	FY 2022	FY 2023	
compensate organizations and individuals representing communities with	Target	Target	
environmental justice concerns when engaged as service providers for the Agency.		75	
(PM EJCR03) Percentage of environmental justice grantees whose funded	FY 2022	FY 2023	
projects result in a governmental response.	Target	Target	
projects result in a governmental response.	Target	No Target	
		Established	
		Established	
(PM EJCR04) Percentage of written agreements between EPA and tribes or	FY 2022	FY 2023	
states implementing delegated authorities that include commitments to	Target	Target	
address disproportionate impacts.		25	
(PM EJCR05) Percentage of state-issued permits reviewed by EPA that	FY 2022	FY 2023	
include terms and conditions that are responsive to environmental justice	Target	Target	
concerns and comply with civil rights obligations.	9	TBD	
(PM EJCR07) Percentage of EPA national program and regional offices	FY 2022	FY 2023	
that extend paid internships, fellowships, or clerkships to college students	Target	Target	
from diverse backgrounds.		50	
(PM EJCR08) Percentage of significant EPA actions with environmental	FY 2022	FY 2023	
justice implications that respond to environmental justice concerns and	Target	Target	
reduce or address disproportionate impacts.		40	
(PM EJCR09) Percentage of programs that have developed clear guidance	FY 2022	FY 2023	
on the use of justice and equity screening tools.	Target	Target	
		100	
		T	
(PM EJCR10) Percentage of EPA programs that work in and with	FY 2022	FY 2023	
communities that do so in ways that are community-driven, coordinated	Target	Target	
and collaborative, support equitable and resilient community development,		TDD	
and provide for meaningful involvement and fair treatment of communities		TBD	
with environmental justice concerns.			
(PM EJCR11) Number of established EJ collaborative partnerships	FY 2022	FY 2023	
utilizing the Key Principles for Community Work (community-driven,	Target	Target	
coordinated, and collaborative).	Target	TBD	
		122	
(PM EJCR12) Percentage of EPA programs and regions that have	FY 2022	FY 2023	
identified and implemented opportunities to integrate environmental justice	Target	Target	
considerations and strengthen civil rights compliance in their planning,		•	
guidance, policy directives, monitoring, and review activities.	15	30	
(PM EJCR13) Percentage of EPA regions and national programs that have	FY 2022	FY 2023	
established clear implementation plans for Goal 2 commitments relative to	Target	Target	
their policies, programs, and activities and made such available to external		100	
partners.			
(DM EICD40) N I e e e e e e e e e e e e e e e e e e	EN7 2022	EN 2022	
(PM EJCR18) Number of information sharing sessions and outreach and	FY 2022	FY 2023	
technical assistance events held with overburdened and underserved	Target	Target	
communities and environmental justice advocacy groups on civil rights and environmental justice issues.	8	12	
environmental justice issues.			

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$113.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$89,586.0 / +69.5 FTE) This program change supports EJ work across the Agency, including substantial increases for FTE support. This investment supports the significantly expanded base activity and agencywide coordination required across the EJ Program. This increase includes \$11.536 million in payroll.
- (+\$11,501.0 / +51.5 FTE) This program change supports EJ work in the regions. This investment supports the significantly expanded base activity and agencywide coordination required in the regional offices. This increase includes \$8.309 million in payroll.
- (+\$10,000.0 / +12.0 FTE) This program change is an increase to establish EPA outreach centers housed in EPA regional offices to connect directly with communities, hold hearings, and support local EJ efforts. This investment includes \$1.936 million in payroll.
- (+\$50,000.0 / +5.0 FTE) This program change increases the Environmental Justice Competitive Grant Program aiming to broadly reduce the disproportionate health impacts of environmental pollution in communities with EJ concerns. This grant program was formerly known as the EJ Collaborative Problem-Solving Cooperative Agreements, and appropriations language has been provided in the proposed EPM Bill Language. This investment includes \$807.0 thousand in payroll.
- (+\$25,000.0 / +3.0 FTE) This program change increases the Environmental Justice Community Grant Program. Eligible recipients would be nonprofit, community-based organizations that conduct activities to reduce the disproportionate health impacts of environmental pollution in communities with EJ concerns. This grant program was formerly known as the EJ Small Grants, and appropriations language has been provided in the proposed EPM Bill Language. This investment includes \$484.0 thousand in payroll.
- (+\$25,000.0 / +3.0 FTE) This program change is an increase to establish an Environmental Justice State Grant Program that would establish or support state government EJ programs, Appropriations language has been provided in the proposed EPM Bill Language. This investment includes \$484.0 thousand in payroll.
- (+\$25,000.0 / +3.0 FTE) This program change is an increase to establish a Tribal Environmental Justice Grant Program. This program would support tribal work to eliminate disproportionately adverse human health or environmental effects in Tribal and Indigenous communities. Appropriations language has been provided in the proposed EPM Bill Language. This investment includes \$484.0 thousand in payroll.

- (+\$15,000.0 / +2.0 FTE) This program change is an increase to establish a competitive, community-based Participatory Research Grant Program. Eligible recipients would be higher education institutions that aim to develop partnerships with community entities to improve the health outcomes of residents and workers in communities with EJ concerns. Appropriations language has been provided in the proposed EPM Bill Language. This investment includes \$323.0 thousand in payroll.
- (+\$10,000.0 / +3.0 FTE) This program change is an increase to establish an Environmental Justice Training Program to increase the capacity of residents of underserved communities to identify and address disproportionately adverse human health or environmental effects. Appropriations language has been provided in the proposed EPM Bill Language. This investment includes \$484.0 thousand in payroll.
- (+\$5,900.0 / +4.0 FTE) This program change is an increase for EJScreen to improve how the Agency utilizes nationally consistent data that combines environmental and demographic indicators to map and identify communities with environmental justice concerns. In addition, resources are included to update EPA's IT systems to support the Climate and Economic Justice Screening tool. This investment includes \$645.0 thousand in payroll.
- (+\$4,000.0 / +5.0 FTE) This program change is an increase to support the National Environmental Justice Advisory Council (NEJAC) and other federal advisory council activities. The EJ Program will provide funding and support for the White House Environmental Justice Advisory Council (WHEJAC) to advise the Interagency Council and Chair of the Council on Environmental Quality (CEQ). This investment includes \$807.0 thousand in payroll.
- (+\$4,000.0 / +3.0 FTE) This program change increases legal support with a focus on EJ issues. This investment includes \$484.0 thousand in payroll.
- (+\$3,000.0 / +3.0 FTE) This program change increases external EJ coordination with other federal agencies. This includes developing and expanding federal best practices around EJ and supporting other federal efforts to expand EJ programs. This investment includes \$484.0 thousand in payroll.
- (+\$5,000.0 / +3.0 FTE) This program change is an increase to establish an Environmental Justice Clearinghouse, which would serve as an online resource for information on EJ, including training materials and a directory of experts and organizations with the capability to provide advice or technical assistance to underserved communities. This investment includes \$484.0 thousand in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); American Rescue Plan Act of 2021 (Pub. L. 117-2).

Geographic Programs

Geographic Program: Chesapeake Bay

Program Area: Geographic Programs Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$77,876	\$87,500	\$90,568	\$3,068
Total Budget Authority	\$77,876	\$87,500	\$90,568	\$3,068
Total Workyears	38.0	38.2	38.2	0.0

Program Project Description:

The Chesapeake Bay is the largest estuary in the United States with a drainage area that covers six states in the mid-Atlantic. The Bay is not only treasured for recreational purposes but also serves as a vital resource for ecological and economic activities in the region and beyond. The Chesapeake Bay Program is a voluntary partnership initiated in 1983 that now includes the Chesapeake Bay watershed states (Delaware, Maryland, New York, Virginia, Pennsylvania, and West Virginia), the District of Columbia, the Chesapeake Bay Commission, and the federal government. EPA represents the federal government on the partnership's Chesapeake Executive Council and, under the authority of Section 117 of the Clean Water Act, works with the Executive Council to coordinate activities of the partnership. On June 16, 2014, the Chesapeake Bay Program partners signed the most recent Chesapeake Bay Watershed Agreement, ²³⁸ which provides for the first time the Bay's headwater states (Delaware, New York, and West Virginia) with full partnership in the Bay Program. The Agreement establishes 10 goals and 31 outcomes including sustainable fisheries, water quality, vital habitats, climate change, and toxic contaminants, with Management Strategies and two-year Logic & Action Plans covering all 31 outcomes.²³⁹

EPA, the watershed jurisdictions, and other key federal agencies set two-year water quality milestones that measure progress made in achieving the Bay Total Maximum Daily Load (TMDL) and the jurisdictions' Watershed Implementation Plans.²⁴⁰ The TMDL satisfies a requirement of the Clean Water Act and EPA commitments under Court-approved consent decrees for Virginia and the District of Columbia dating to the late 1990s.²⁴¹ The TMDL is designed to ensure all nitrogen, phosphorus, and sediment pollution control efforts needed to restore the Bay and its tidal rivers are in place by 2025.

²³⁸ The Chesapeake Bay Watershed Agreement (2014) available at:

http://www.chesapeakebay.net/documents/FINAL_Ches_Bay_Watershed_Agreement.withsignatures-HIres.pdf. 239 For additional information on the progress being achieved, visit: https://www.epa.gov/restoration-chesapeake-bay.

²⁴⁰ The federal milestones related to water quality in the Chesapeake Bay watershed are available at http://executiveorder.chesapeakebay.net/EO 13508 Water Quality Milestones-2012-01-06.pdf. The jurisdictional milestones

are available at: https://www.epa.gov/chesapeake-bay-tmdl/chesapeake-bay-milestones. ²⁴¹ The Chesapeake Bay TMDL, available at: http://www.epa.gov/chesapeake-bay-tmdl/.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA will focus on supporting implementation of the two-year logic and action plans for the 25 management strategies developed under the Agreement, with particular focus on accelerating implementation of outcomes where progress is lagging. The program is increasing focus on environmental justice ensuring the benefits of the Chesapeake Bay Program are distributed equitably. In addition, the program is increasing efforts in the climate change space by focusing initiatives on the resiliency of the watershed. Specific emphases include:

- Implementing the water quality outcomes that describe the commitment of the Agreement signatories for having all practices in place by 2025 to achieve the necessary pollutant reductions;
- Accelerating implementation of outcomes that help keep the watershed resilient in the face of climate change (including forest and wetland protection and restoration);
- Maintaining the historically strong submerged aquatic vegetation, and tidal and non-tidal water quality monitoring programs implemented through state grants and federal interagency agreements;
- Ensuring the most up-to-date science is used throughout the Chesapeake Bay Program to support decision-making, implementation, and future condition assessment (for example, improving computer models to help predict the impact of climate change on the Chesapeake Bay Program's ability to meet water quality standards in the tidal waters of the Chesapeake Bay); and
- Implementing an action plan to improve diversity, equity, inclusion, and justice in Chesapeake Bay Program restoration efforts.

Environmental results, measured through data collected by the states and shared with the federal government, show the importance of the investment that federal, state, and local governments have made in providing clean and safe water. Every year, the Chesapeake Bay Program uses available monitoring information from the 92 segments of the Chesapeake Bay to estimate whether each segment is attaining criteria for one or more of its designated uses. EPA, along with other federal, state, and academic partners, are using this information to demonstrate progress toward meeting water quality standards and the Bay TMDL.

States have reported that, as of 2020, best management practices to reduce pollution are in place to achieve 45 percent of the nitrogen reductions, 65 percent of the phosphorus reductions, and 100 percent of the sediment reductions needed to attain applicable water quality standards when compared to the 2009 baseline established in the Bay TMDL.²⁴²

EPA will continue to provide the Chesapeake Bay Program partnership with funding and technical assistance, track and report progress, and coordinate and facilitate partnership efforts to reach our mutual goals of a healthy Bay and watershed. While continuing progress toward restoring the Bay watershed, EPA and other Executive Council members signed and released the historic *Statement*

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²⁴² For more information, please see https://www.chesapeakeprogress.com/clean-water/watershed-implementation-plans.

in Support of Diversity, Equity, Inclusion and Justice.²⁴³ This statement reaffirmed the Executive Council's commitment to recruit and retain staff and volunteers that reflect the diversity of the watershed, foster a culture of inclusion and respect across all partner organizations, and ensure the benefits of our science, restoration, and partnership programs are distributed equitably without disproportionate impacts on overburdened and underserved communities.

Additionally, EPA is working to integrate climate change in Bay restoration efforts. EPA is addressing climate change in three ways: 1) in 2025, predicting the impact of 2035 climate changes on water quality and adjusting pollution targets; 2) understanding adaptations needed in the watershed and coastal regions; and 3) maintaining or improving the watershed's resiliency to climate change. Work is underway to develop state-of-the-science models of the Chesapeake airshed, watershed, and tidal waters to refine the 2035 climate risk in the 2025 Chesapeake Bay Assessment. Also, EPA and the Bay Program partnership are actively investigating best management practices to better protect the watershed and tidal Bay against the observed increased precipitation volumes and intensity brought about by climate change in urban and agricultural regions.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$114.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,954.0) This program change is an increase that supports projects to accelerate the restoration of the Chesapeake Bay.

Statutory Authority:

Clean Water Act, Section 117; Estuary Restoration Act of 2000; Chesapeake Bay Accountability and Recovery Act of 2014; Clean Air Act; Further Consolidated Appropriations Act, 2022, Pub. L. 117-103.

²⁴³ For more information, please see https://www.chesapeakebay.net/channel-files/40996/deij-statement-final-all-signatures.pdf

Geographic Program: Gulf of Mexico

Program Area: Geographic Programs Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$5,335	\$20,000	\$22,524	\$2,524
Total Budget Authority	\$5,335	\$20,000	\$22,524	\$2,524
Total Workyears	15.4	14.7	14.7	0.0

Program Project Description:

The Gulf of Mexico is the ninth largest body of water in the world. The Mississippi River is the main river system which drains into the Gulf. The Mississippi River watershed captures drainage from 41 percent of the land area of the contiguous United States (includes parts of 31 states). This area equals approximately 1,467,182 square miles. Through coordinated public collaboration, EPA works to restore the Gulf, and ultimately improve the health of the coastal area benefiting approximately 16 million Americans. 244

The mission of the EPA's Gulf of Mexico Division (GMD) is to facilitate collaborative actions which protect, maintain, and restore the health and productivity of the Gulf of Mexico in ways consistent with the economic well-being of the region. The GMD competitively funds projects and uses interagency agreements and strategic partnerships to accomplish its mission. All GMD projects and partnership work are linked to one or more of the following performance measures: 1) improve and/or restore water quality; 2) protect, enhance, or restore coastal and upland habitats; 3) promote and support environmental education and outreach to inhabitants of the Gulf watershed; and 4) support the demonstration of programs, projects, and tools which strengthen community resilience. The GMD provides significant leadership and coordination among state and local governments, the private sector, tribes, scientists, and citizens to align efforts that address the challenges facing the communities and ecosystems of the Gulf Coast.

The GMD is committed to voluntary, non-regulatory actions and solutions based on scientific data and technical information informed by work conducted with partners and the public.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

²⁴⁴ For more information please see: https://www.census.gov/content/dam/Census/library/visualizations/2019/demo/coastline-america-print.pdf.

²⁴⁵ For more information please see: https://www.epa.gov/gulfofmexico/2021-gulf-mexico-division-annual-report.

In FY 2023, the Agency will continue supporting specific actions and solutions designed to improve the environmental and economic health of the Gulf of Mexico region through cooperative efforts and partnerships. Specifically, the Agency will address nutrient reduction on agricultural lands with a targeted focus on minority farmers and ranchers. Additionally, GMD will center its focus on sustainable agriculture and resilience in the farming community. EPA will continue to expand Science, Technology, Engineering, and Mathematics (STEM) experiential and workforce development to overburdened, underserved and vulnerable communities beleaguered by environmental injustices. Through green infrastructure practices such as artificial reefs, riparian buffers, prairies, and living shorelines, GMD will continue to aid climate change practices, including helping communities increase resilience. The GMD projects are competitively funded and coordinated with and complement ongoing Resource and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies (RESTORE) and Natural Resource Damages Assessment (NRDA) activities related to the Deepwater Horizon oil spill. The GMD continues to seek broad participation and input from the diverse stakeholders who live, work, and recreate in the Gulf Coast region.

The GMD directly supports the following activities:

Environmental Education and Outreach

In FY 2023, the GMD will continue to promote the use of best available science and healthy environmental practices by developing programs, establishing partnerships, and competitively funding projects that increase environmental literacy. The GMD will enhance experiential learning opportunities for Gulf residents and visitors alike. The GMD will support practitioners of environmental education initiatives in using science-based data so Gulf residents can share a commonality of interest to preserve the Gulf of Mexico.

To ensure that environmental education and outreach efforts extend to overburdened and underserved populations, GMD will work with various sectors of government, community leaders, and academia on projects that improve conditions in communities with environmental justice concerns. Education and outreach are vital components and essential to accomplishing the Agency's mission to protect human health and the environment, to serve communities with environmental justice concerns, and to meet the GMD specific goals of promoting healthy and resilient coastal communities. All Gulf residents deserve the best information as it directly relates to their health, the economic vitality of their communities, and their overall quality of life.

Strengthen Community Resilience

Coastal and inland communities continuously face various natural and man-made challenges of living along the Gulf of Mexico coastline. These challenges include storm risk, land and habitat loss, depletion of natural resources, compromised water quality, and economic fluctuations. In FY 2023, the GMD will continue the robust partnerships and extensive community interactions to strengthen coastal and near-shore community preparedness. Through actions, activities, partnerships, and projects, communities throughout the Gulf will be more resilient, and thus better prepared for natural disasters or other situational emergencies. The Community Resilience Index

Tool provides municipalities with a method assessing vulnerabilities and creates a pathway for taking measures to improve conditions.

Improve Water Quality

The Clean Water Act provides authority and resources to protect and improve the water quality in the Gulf of Mexico and all waters of the United States. The GMD implements projects and works with its partners, such as the Hypoxia Task Force, to improve water and habitat quality throughout the Gulf of Mexico watershed. The GMD funds projects which improve water quality on a watershed basis. The Mobile Bay National Estuary Program (MBNEP) developed a strategy for a trash abatement initiative in the Three Mile Creek (TMC) Watershed. The total trash removed over the life of the project was over 5 tons, with 20 percent recycled. This success led to additional funding and greater ownership by the local municipality and the approach has been replicated in other areas through collaboration and technology transfer.

Enhance, Protect, or Restore Coastal Habitats

Managing critical ecosystems is widely recognized as a fundamental environmental challenge throughout the Gulf Coast region. The priority issues include, but are not limited to, sediment management, marsh/habitat loss due to subsidence, the continued reduction of freshwater in-flow, and climate change. For decades, the Gulf Coast has endured extensive natural and man-made damage to key habitats such as coastal wetlands, estuaries, barrier islands, upland habitats, seagrass vegetation, oyster reefs, coral reefs, and offshore habitats. In FY 2023, the GMD will continue working in close partnership to enhance coastal ecosystems, improve sediment movement/management, restore acreage where feasible and cost-effective, and reverse the effects of long-term habitat degradation.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$80.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,444.0) This program change is an increase of resources that support projects to accelerate the restoration of the Gulf of Mexico.

Statutory Authority:

Clean Water Act; Further Consolidated Appropriations Act, 2022, Pub. L. 117-103.

Geographic Program: Lake Champlain

Program Area: Geographic Programs Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$14,996	\$15,000	\$20,000	\$5,000
Total Budget Authority	\$14,996	\$15,000	\$20,000	\$5,000

Program Project Description:

The trans-boundary region of Lake Champlain is a resource of national significance and home to more than 600,000 people, about 35 percent of whom depend on the lake for drinking water. The 8,234-square mile basin includes areas in Vermont, New York, and the Province of Quebec. Lake Champlain draws millions of visitors annually. The Lake Champlain Basin Program (LCBP) supports implementation in Vermont and New York of a comprehensive pollution prevention, control, and restoration plan for protecting the future of the Lake Champlain Basin. Through the LCBP, EPA is addressing various threats to Lake Champlain's water quality, including phosphorus loadings, invasive species, and toxic substances. 246

The Program's goal is to achieve clean waters that will sustain diverse ecosystems, vibrant communities, and working landscapes. These ecosystems should provide clean water for drinking and recreation and support a habitat that is resilient to extreme events and free of aquatic invasive species.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

EPA's budget request will allow the Program to address high levels of phosphorus by implementing priority actions identified in the Opportunities for Action management plan to reduce phosphorus loads. The 2016 Vermont Total Maximum Daily Load (TMDL) for Phosphorus for Lake Champlain is central to the planning and implementation work within the Lake Champlain Basin to reduce phosphorus loads and meet the wasteload and load allocations specified in the TMDL. Phosphorus reductions from the New York portion of the Basin continue to be subject to the TMDL approved in 2002.

The LCBP also will increase efforts to better understand how to address harmful algal blooms (HABs) and prevent the introduction and spread of invasive species.

²⁴⁶ For additional information see: https://www.epa.gov/tmdl/lake-champlain-phosphorus-tmdl-commitment-clean-water and https://www.lcbp.org,

In FY 2023, EPA will focus on the following activities:

- Ninety-three percent of the total phosphorus load to the lake is from stormwater or nonpoint source runoff, and seven percent is from wastewater treatment plant sources in Vermont, New York, and Quebec. EPA and its partners will continue to reduce phosphorous pollution from wastewater treatment facilities, stormwater runoff, and nonpoint sources to meet reductions specified in the Vermont and New York Total Maximum Daily Loads (TMDLs). Specifically, EPA will focus on:
 - Ensuring that facilities' permits remain consistent with the Clean Water Act, necessary upgrades to treatment facilities are completed, and the treatment optimization efforts continue throughout the Basin.
 - o Implementing stormwater planning, design, and construction of green stormwater infrastructure at Vermont public schools and state universities, and implementation of best management practices on rural roads in both Vermont and New York, thereby increasing their resiliency to climate impacts. Addressing agricultural nonpoint sources including continued research to determine the efficiency of agricultural best management practices; evaluating farm practices to identify where practices are needed; and decommissioning former agricultural lands better suited for habitat and floodplain restoration efforts.
- The Lake Champlain Special Designation Act calls for the review and revision, as necessary, of the Program management plan at least once every five years. The LCBP expects to approve an updated management plan, in FY 2022 and will work under the direction of the Lake Champlain Steering Committee to begin implementing the plan in FY 2023.
- Funding in FY 2023 will support work on aquatic invasive species that harm the environment, economy, or human health, including aquatic plants, animals, and pathogens. EPA will continue to work with partners to understand the impact of any potential spread. The Agency also will continue to monitor invasive water chestnuts and fund efforts to reduce their density and distribution. Additionally, EPA and its partners will continue to implement the activities identified in the Great Lakes and Lake Champlain Invasive Species Program Report²⁴⁷ submitted to Congress under requirements of the Vessel Incidental Discharge Act.
- The LCBP will continue to support the development of new ways to understand the high seasonal concentrations of Harmful Algal Blooms, report on their potential health impacts, and provide necessary information to the health departments of New York and Vermont to close beaches, protect drinking water intakes, or take other actions. In addition, the Program will investigate developing new approaches for urban and agricultural stormwater control.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

²⁴⁷ For more information please visit: https://www.epa.gov/greatlakes/great-lakes-and-lake-champlain-invasive-species-program-report.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$5,000.0) This program change is an increase of resources that support projects to accelerate the restoration of Lake Champlain.

Statutory Authority:

Boundary Waters Treaty of 1909; Clean Water Act; Further Consolidated Appropriations Act, 2022, Pub. L. 117-103.

Geographic Program: Long Island Sound

Program Area: Geographic Programs Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$30,361	\$30,400	\$40,002	\$9,602
Total Budget Authority	\$30,361	\$30,400	\$40,002	\$9,602
Total Workyears	1.5	2.0	2.0	0.0

Program Project Description:

The Long Island Sound Program protects wildlife habitat and water quality in one of the most densely populated areas of the United States, with nearly nine million people living in the watershed. In total, the Long Island Sound watershed comprises more than 16 thousand square miles, including virtually the entire state of Connecticut, and portions of New York, Rhode Island, Massachusetts, Vermont, and New Hampshire. The Long Island Sound provides recreation for millions of people each year and provides a critical transportation corridor for goods and people. The Long Island Sound continues to provide feeding, breeding, nesting, and nursery areas for diverse animal and plant life. The ability of the Long Island Sound to support these uses is dependent on the quality of its waters, habitats, and living resources. The Long Island Sound watershed's natural capital provides between \$17 and \$37 billion in ecosystem goods and services every year. 248

Improving water quality and reducing nitrogen pollution are priorities of the Long Island Sound Program. The Program is making measurable differences in the region. Through State Revolving Fund and local investments of more than \$2.5 billion to improve wastewater treatment, the total nitrogen load to the Long Island Sound in 2020 decreased by 47 million pounds from 1990 levels, a 60 percent reduction. This and other investments have enabled the EPA-State partnership to attain the pollution reduction targets set in 2000.

The Program also is focused on habitat protection and restoration. The Program has restored 459 acres of coastal habitat between 2015-2021 achieving 130 percent of the five-year goal set in 2015. The Program is currently ahead of schedule in restoring one thousand acres by 2035.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

²⁴⁸ For more information please see: Kocian, M., Fletcher, A., Schundler, G., Batker, D., Schwartz, A., Briceno, T. 2015. The Trillion Dollar Asset: The Economic Value of the Long Island Sound Basin. Earth Economics, Tacoma, WA.

In FY 2023 the Program will continue to oversee implementation of the Long Island Sound Study (LISS) Comprehensive Conservation and Management Plan (CCMP)²⁴⁹ by coordinating the cleanup and restoration actions of the LISS Management Conference. The LISS CCMP is organized around four major themes: 1) Clean Waters and Healthy Watersheds; 2) Thriving Habitats and Abundant Wildlife; 3) Sustainable and Resilient Communities; and 4) Sound Science and Inclusive Management. Throughout the four themes, the CCMP incorporates key challenges and environmental priorities including resiliency to climate change, long-term sustainability, and environmental justice. The plan also set 20 quantitative ecosystem recovery targets to drive progress. In 2020, the LISS updated the CCMP with 136 implementation actions covering the period 2020-2024. In FY 2023, the EPA will focus on the following:

- Continue to reduce nitrogen pollution through implementing the Nitrogen Reduction Strategy. EPA will work cooperatively with Connecticut and New York to expand modeling and monitoring to develop numeric nitrogen targets that are protective of designated uses and set local nitrogen reduction targets where necessary.
- Coordinate priority watershed protection programs such as increasing streamside buffer zones as natural filters of pollution.
- Support community sustainability and resiliency through the new LISS Sustainable and Resilient Communities Work Group to help communities plan for climate change impacts while strengthening ecological health and protecting local economies.
- Integrate environmental justice considerations across program decision-making and implementation through the new LISS Environmental Justice Work Group.
- Conduct more targeted outreach and engagement efforts to understand community needs in areas with environmental justice concerns.
- Support an internal assessment to understand the diversity, equity, inclusion and justice training needs within the LISS partnership;
- Provide technical and financial assistance through an environmental justice subaward program.
- Continue exploring ways to support the participation of new and diverse partners in LISS programs and decision-making.
- Expand tracking and reporting of implementation efforts.
- Continue coordinated water quality monitoring.
- Coordinate the protection and restoration of critical coastal habitats to improve the productivity of tidal wetlands, inter-tidal zones, and other key habitats that have been adversely affected by unplanned development, overuse, land use-related pollution effects, and climate change (e.g., sea level rise, warming temperatures, changes in salinity and other ecological effects).
- Provide technical and financial assistance through the Long Island Sound Futures Fund.
- Conduct focused scientific research into the causes and effects of pollution on the Sound's living marine resources, ecosystems, water quality, and human uses to assist managers and public decision-makers in developing policies and strategies to address environmental, social, and human health impacts.

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²⁴⁹ For more information please visit: https://longislandsoundstudy.net/2015/09/2015-comprehensive-conservation-and-management-plan/.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$9.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$9,593.0) This program change is an increase of resources that support projects to accelerate the restoration of Long Island Sound.

Statutory Authority:

Clean Water Act § 119.

Geographic Program: Other

Program Area: Geographic Programs Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$6,731	\$10,400	\$11,208	\$808
Total Budget Authority	\$6,731	\$10,400	\$11,208	\$808
Total Workyears	4.8	5.7	5.7	0.0

Program Project Description:

EPA targets efforts to protect and restore many of the unique communities and ecosystems across the United States through the geographic programs. In order to protect these treasured resources impacted by environmental problems, the Agency develops and implements approaches to mitigate sources of pollution and cumulative risk. These approaches improve quality of the water resources in ecosystems and the health of residents that rely on them. While substantial progress has been made in all these programs, more work is required to further reduce toxins, lower nutrient loads into watersheds and water bodies, increase ecologically and economically important species, restore habitats, and protect human health.

The Northwest Forest Program

The Northwest Forest Program addresses water quality impairments in forested watersheds and works to improve the quality and quantity of surface water so that beneficial uses and drinking water/source water protection goals are met. Climate change is increasing the demands on the program due to the increase of catastrophic wildfires and resulting impacts to water quality and municipal drinking water.

The Northwest Forest Program supports monitoring of watershed conditions across 72 million acres of forest and rangelands in the Northwest. In Oregon and Washington, 40 to 90 percent of the land area within national forests supply drinking water to communities west of the Cascade Range crest. This program provides the data needed to help manage these drinking water resources. Funding allows EPA to provide critical support to the Aquatic Riparian Effectiveness Monitoring Program and the Pacfish/Infish Biological Opinion Effectiveness Monitoring Program. These regional scale watershed monitoring programs are essential to determining the effectiveness of riparian management in meeting aquatic/riparian habitat, ecosystem function, and water quality standards.

The Northwest Forest Program also helps EPA respond to tribal trust and treaty responsibilities. EPA staff are key to protection and restoration of watersheds and water quality important to tribes. EPA has tribal trust responsibilities in the Northwest for tribes reliant on salmon and shellfish.

The Lake Pontchartrain Basin Restoration Program

The purpose of this Program is to restore the ecological health of the Lake Pontchartrain Basin²⁵⁰ by developing and funding restoration projects and related scientific and public education projects. Program activities include conducting water quality monitoring, educating basin residents on water protection and pollution prevention, conducting sewer system evaluations and surveys and developing designs and studies to determine infrastructure upgrades to prevent or reduce pollution.

The Basin comprises over 5 thousand square miles of land in 16 Louisiana parishes and 4 Mississippi counties. The land use of the Basin ranges from rural to urban and is the most densely populated region in Louisiana, including metropolitan New Orleans and Louisiana's capitol, Baton Rouge. The Basin provides a home and natural habitat to 2.1 million people and many plants, animals and fish. It is one of the largest estuarian systems in the United States, containing over 22 essential habitats. The Basin's topography ranges from rolling woodlands in the north to coastal marshes in the south, with the 630 square mile Lake Pontchartrain, the second largest saltwater lake in the United States, as its centerpiece.

Projects funded under this program maintain, protect, and restore the water quality and ecosystems of the Basin. These projects reduce the risk of pollution, increase protection of fisheries and drinking water sources and enhance recreational opportunities for the citizens of Louisiana.

Southeast New England Program (SNEP)

Southeast New England (from Westerly, Rhode Island, to Pleasant Bay, Massachusetts) faces environmental challenges that are both unique and highly representative of critical national problems, especially in coastal areas. Typical problems include rivers hydrologically disconnected by dams and restrictions, lost wetland functions, urbanization, and centuries-old infrastructure – all compounded by the increasing impacts of excess nutrients from wastewater, stormwater runoff, and atmospheric deposition. Excess nutrients have contributed to severe water quality problems including algal blooms, low dissolved oxygen conditions, fish kills, impaired benthic communities, and habitat loss (sea grass and salt marsh) in estuaries and near-coastal waters of this region and worldwide. The impacts of climate change, especially the likelihood of extreme weather events and increased precipitation, will further stress these systems in coming years, not only environmentally but also socially and economically. The program seeks to link environmental quality to economic opportunity and jobs by delivering local solutions in a regional and watershed context. Taking up and successfully addressing these issues will enable the Program to serve as a model for other areas.

SNEP serves as a hub to enable protection and restoration of the coastal watersheds of Southeast New England. Protecting these watersheds and the ecosystem services they provide will help sustain the region's communities and environmental assets into the future. SNEP draws upon networks of stakeholders and experts to seek out and support innovations in practices, technology, and policies that will enable better and more effective watershed protection and restoration. The

https://www.law.cornell.edu/definitions/uscode.php?width=840&height=800&iframe=true&def_id=33-USC-63955993-1352769591&term_occur=999&term_src=title:33:chapter:26:subchapter:I:section:1273.

²⁵⁰ For more information please visit:

goal is to create a sustainable path for change and to lead the next generation of environmental management by:

- Developing and investing in innovative, cost-effective restoration and protection practices, as well as new regulatory, economic, and technology approaches.
- Providing technical assistance to municipalities, tribes, and local organizations.
- Supporting local restoration efforts.
- Integrating delivery of programs to the public by our fellow agencies and partners.
- Focusing on ecosystem services.
- Improving technology transfer and delivery of restoration programs across the region.

Columbia River Program (CRBRP)

The Columbia River Basin (Basin) is one of North America's largest watersheds, covering approximately 260 thousand square miles, originating in British Columbia, Canada, with seven states including significant portions of Idaho, Montana, Oregon, and Washington. The Basin provides environmental, economic, cultural, and social benefits and is vital to many entities and industries in the Pacific Northwest, including tribal, recreational, and commercial fisheries; agriculture; forestry; recreation; and electric power generation.

Human activities have contributed to impaired water quality that impacts human health, and fish and wildlife species survival. Tribal fish consumers, other high fish consumers and subsistence fishers, are exposed to known toxic contaminants and increased human health risks. Beginning in 2004, EPA has made a priority commitment to reducing toxics in the Basin reflecting a responsibility to environmental justice for tribal people to protect human health and help restore and protect fish and wildlife populations. There are several endangered fish and wildlife species throughout the Basin. A major salmon restoration effort is underway that has expended millions of dollars to restore salmon throughout the Basin.

In 2016, Congress adopted the Columbia River Basin Restoration Act as Section 123 of the Clean Water Act (CWA), which directs EPA to lead a Basin-wide collaboration and competitive grant program to assess and reduce toxics in the Basin. Section 123 also directs EPA to: establish a Columbia River Basin Restoration Program (CRBRP) to assess trends in water quality; collect and assess data to identify possible causes of environmental problems; provide grants for projects for specific purposes; and establish a voluntary Columbia River Basin Restoration Working Group.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

Funding will be split amongst the Northwest Forest Program, Lake Pontchartrain Program, Southern New England Program and Columbia River Basin Program for restoration of the four geographic programs with an emphasis on initiatives that advance environmental justice and address the threats exacerbated by climate change.

Northwest Forest Program

In FY 2023, the Program will support the following activities:

- Wildfires impact monitoring and assessment of water quality in watersheds impacted by the catastrophic 2020 Labor Day fires in Oregon and anticipated future fire seasons in the Pacific Northwest.
- Aquatic and Riparian Effectiveness Monitoring (AREMP) of the Northwest Forest Plan and Bureau of Land Management (BLM) Western Oregon Resource Management Plan to help maintain and restore watersheds across 24 million acres of federal lands in western Washington and Oregon, and northern California.
- The PacFish/InFish Biological Opinion Effectiveness Monitoring Program to monitor stream and riparian habitats for both inland fish species and anadromous fish like salmon that rely on both the Pacific Ocean and freshwater rivers to ensure conservation strategies are working effectively to sustain fish populations.
- The Drinking Water Providers Partnership an annual public-private funding opportunity for water providers and watershed restoration practitioners in Oregon and Washington to implement riparian or in-stream restoration actions to restore and protect the health of watersheds and drinking water.
- States' implementation of forestry non-point source programs and development of Total Maximum Daily Loads (TMDLs) and Best Management Practices for forestry.
- Development of Spatial Statistical Network models to evaluate impacts of forest practices and climate change on stream temperatures across entire watersheds. Further support for watershed management and development and implementation of TMDLs.
- Collaboration with partners and local water providers to address sediment and temperature impairments in forested watersheds.

Lake Pontchartrain

In FY 2023, the Program will help restore the ecological health of the Lake Pontchartrain Basin by:

- Continuing the implementation of the Lake Pontchartrain Basin Program Comprehensive Management Plan²⁵¹ and Comprehensive Habitat Management Plan, including implementation of restoration projects to address saltwater intrusion-wetland loss and sewage, agricultural, and stormwater runoff.
- Planning and design of consolidated wastewater treatment systems to support sustainable infrastructure.
- Conducting water quality monitoring outreach and public education projects.
- Protecting and restoring critical habitats and encouraging sustainable growth by providing information and guidance on habitat protection and green development techniques.

Southeast New England Program (SNEP)

In FY 2023, the Program will support technical assistance, grants, interagency agreements, and contracts to spur investment in regionally significant and/or landscape-scale restoration

²⁵¹ For more information please see: https://scienceforourcoast.org/about-us/about-pc/management-plan/.

opportunities, more fully integrate restoration actions, build local capacity, promote policy and technology innovation, encourage ecosystem (water quality and habitat) approaches, and enact the Southeast New England Program's new Five-Year Strategic Plan. ²⁵² SNEP is tracking community engagement and is committed to trying to provide funding or technical assistance to 25 percent of regional municipalities (34 out of 133) and 50 percent of federally-recognized tribes (2 of 4) by the end of FY 2025. Specific activities include:

- Investing in on-the-ground environmental restoration/protection projects through the SNEP Watershed Implementation Grants (SWIG) Program.
- Building capacity of municipalities and other organizations to actively participate in implementing restoration projects and effectively managing their environmental programs through the SNEP Network.
- Promoting the development of next-generation watershed management tools.
- Collaborating among the Narragansett Bay and Buzzards Bay National Estuary Programs, the states of Rhode Island and Massachusetts, the Cape Cod Commission and other Cape organizations, municipalities, and key stakeholders to identify, test, promote, and implement approaches that can be replicated across Southeastern New England, with a focus on the nexus between habitat, nutrients, and stormwater and ecosystem and community resilience.
- Funding pilot projects and research to introduce innovations and practices that accelerate and guide ecosystem restoration and avoid or reduce nutrient impacts through interagency agreements with other federal agencies, including the U.S. Geological Survey and Department of Energy.
- Continuing the SNEP Pilot Watershed Initiative which seeks to concentrate and quantitatively evaluate the effectiveness of coordinated environmental restoration projects at a sub-watershed scale. Leveraging for efficiency and effectiveness by coordinating operations, resources, and funding principles among restoration partners, including federal and state agencies.
- Continuing development of a framework for a regional monitoring strategy that would ultimately provide data to inform a periodic report on the state of the SNEP region.

Columbia River Basin Program (CRBRP)

The EPA CRBRP's vision is to be a catalyst for broad toxics reduction work efforts and basin-wide collaboration to achieve a healthy ecosystem with significantly reduced toxic levels in fish, wildlife, and water to enable communities to access unimpaired watersheds with healthy fish and wildlife habitat. Key FY 2023 plans for EPA's CRBRP include:

- Continuing to manage the implementation of the CRBRP grant program awards to monitor and reduce toxics in the Basin.
- Competing a third round of CRBRP funding assistance utilizing FY 2023 appropriations.
- Providing technical assistance and communication products for the Columbia River Basin Restoration Working Group and the general public.

²⁵² For more information visit: https://www.epa.gov/snep/snep-strategic-plan

- Continuing to update the EPA Columbia River Basin website which serves as a source of technical references and other information on understanding and reducing toxics in the Basin.
- Integrating Environmental and Tribal Justice and Treaty Rights into the program.
- Supporting climate adaptation strategies and resilience as it relates to toxics reduction.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$1.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$807.0) This program change is an increase of resources that support projects to accelerate the restoration of the Geographic Program: Other areas.

Statutory Authority:

Clean Water Act.

Geographic Program: South Florida

Program Area: Geographic Programs Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$1,369	\$6,000	\$7,202	\$1,202
Total Budget Authority	\$1,369	\$6,000	\$7,202	\$1,202
Total Workyears	1.3	1.3	1.3	0.0

Program Project Description:

The South Florida Program ecosystem extends from Chain of Lakes near Orlando, Florida, south about 250 miles to Florida Bay. Nine million people, two Federally Recognized Native American Tribes: Seminole and Miccosukee, three National Parks, 15 National Wildlife Refuges, Big Cypress National Preserve, the Florida Keys National Marine Sanctuary, the Everglades and unique coastal resources: St. Lucie and Caloosahatchee Estuaries, Indian River Lagoon, Biscayne Bay, Florida Bay, Florida Keys, and coral reefs make up this unique and sensitive ecosystem. These ecosystems support a multi-billion-dollar economy through outdoor tourism, boating, recreational and commercial fishing, coral reef diving, and world-class beaches.

Challenges faced include: the long-term sustainability of sensitive natural areas, agriculture, and the expanding human population; balancing the region's often conflicting flood control, water supply and water quality needs; mitigating and adapting for extreme weather events and sea-level rise. EPA is committed to protecting and restoring these resources in South Florida.

EPA's South Florida Program coordinates restoration activities in South Florida, including ongoing restoration efforts in the Everglades and the Florida Keys where water quality and habitat are directly affected by land-based sources of pollution. EPA implements, coordinates, and facilitates activities through a variety of programs including: the Clean Water Act (CWA) Section 404 Wetlands Program; the Everglades Water Quality Restoration Strategies Program; the Everglades Regional Environmental Monitoring and Assessment Program; the Florida Keys National Marine Sanctuary Water Quality Protection Program; the Florida Keys National Marine Sanctuary Water Quality Monitoring Program; the Coral Reef Environmental Monitoring Program; the Benthic Habitat Monitoring Program; the Southeast Florida Coral Reef Initiative, as directed by the U.S. Coral Reef Task Force; and other programs. ^{253,2} The South Florida Program furthers the goal of addressing water quality concerns in communities burdened with multiple sources of pollutions as well as builds resiliency against climate events in the region.

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²⁵³ For more information please see: http://www.epa.gov/aboutepa/about-epa-region-4-southeast.

² For more information please see: https://www.epa.gov/everglades.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

The South Florida Program supports efforts to protect and restore ecosystems impacted by environmental challenges. In FY 2023, EPA will focus on the Florida Keys Water Quality Protection Program, Florida Coral Reef Tract, Everglades Restoration, nutrient reduction to reduce harmful algal blooms, and CWA Section 404 implementation.

- The Florida Keys National Marine Sanctuary Water Quality Protection Program engages stakeholders across the breadth of the Florida Keys to review long-term monitoring projects of water quality and ecosystems related to water quality in the Keys. Data generated by EPA partners informs these programs which have documented periodic oceanographic events such as algal blooms, seagrass die-offs, and coral diseases, and have provided the foundational data for the development of nutrient numeric criteria. The long-term status and trend collected by the Coral Reef Environmental Monitoring Program is tracking the ongoing Stony Coral Tissue Loss Disease that continues to decimate over 20 reef building corals species of the Florida Reef Tract. To date, the South Florida Program has provided more than \$3.0 million to support coral research to hinder or halt the disease destroying corals reefs that are vital to Florida's ecotourism industry and that serve as a natural mitigation barrier from storms and hurricanes.
- The Everglades Regional Environmental Monitoring and Assessment Program is an EPA conducted extensive assessment of the Everglades' health since 1993. Federal and state agencies, tribes, agriculture, the public, non-governmental organizations, and the National Academies of Sciences use the data to understand water quality and ecological conditions and to assess restoration progress. The data also help to explain the effectiveness of control programs for phosphorus and mercury.
- The Comprehensive Everglades Restoration Plan (CERP) is a \$20 billion federal-state restoration effort with over 60 projects that affect aquatic resources throughout south Florida. EPA will continue CWA and National Environmental Policy Act coordination with the US Army Corps of Engineers, Florida Department of Environmental Protection, South Florida Water Management District and Tribes for CERP planning and implementation.
- This program will continue implementation of the Florida Keys Wastewater Master Plan to provide Advanced Wastewater Treatment or Best Available Technology services to all homes and businesses in the Florida Keys through the EPA and state co-chaired FKNMS Water Quality Protection Program. The goal is to remove from service all non-functioning septic tanks, cesspits, and non-compliant wastewater facilities. More than 90 percent of Florida Keys homes and business are on advanced wastewater treatment systems and more than 30 thousand septic tanks have been eliminated.
- This program will continue support for restoration, monitoring, and modeling of seagrass communities within St. Lucie Estuary, the Caloosahatchee Estuary, Indian River Lagoon, Biscayne Bay, and Florida Keys to address of loss of seagrass meadows from phosphorus

enrichment and chlorophyll increases resulting in dying seagrass beds, increasing harmful algal blooms, fish kills, and manatee deaths.

- EPA will continue work with State and local governments, universities, and non-governmental organizations to implement on-the-ground and satellite water quality monitoring programs for the Florida Keys, Biscayne Bay, St. Lucie Estuary, Florida Bay, and Caloosahatchee Estuary. EPA has provided more than \$4 million to support water quality that includes water quality monitoring; harmful algal blooms detection, nutrient source identification and tracking; bacteria (enterococcus) tracking for healthy beaches; and submarine groundwater discharge to evaluate groundwater as a potential nutrient source.
- The FY 2023 budget request continues support for oysters, seagrass, mangroves, and sponge
 restoration efforts that reestablish and rehabilitate these natural systems; identify and map
 habitat areas for protection, restoration and management; and develop conservation /
 restoration plans for these resilient ecosystems that provide habitat, food, nutrient removal,
 water filtration, storm attenuation, carbon storage and shoreline stabilization in South Florida.
- EPA will develop an annual Request for Applications for FY 2023 funds and continue management of more than \$20 million in South Florida prior-year projects enhancing water quality, coral, and seagrass monitoring; restoring coral, seagrass and sponge ecosystems; developing models to identify pollutant sources; investigating emerging contaminants and researching water quality environments conducive to algal blooms.
- EPA will continue to work with the Florida Department of Environmental Protection (FDEP), local municipalities, and grantees to quantifying the impact of shallow wastewater effluent injection on groundwater nutrient fluxes to surface waters in the Florida Keys National Marine Sanctuary.
- This program will support CWA Section 404 implementation, including wetlands conservation, permitting, dredge and fill, and mitigation banking strategies through collaboration with U.S. Army Corps of Engineers and FDEP.
- EPA will continue to work with the State of Florida on Everglades Water Quality Restoration Strategies to address pollution. Part of this work will be tracking progress on the National Pollutant Discharge Elimination System permits and consent orders within the Everglades, including discharge limits for phosphorus and corrective actions that are consistent with state and federal law and federal court consent decree requirements.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$5.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$1,197.0) This program change is an increase of resources that support projects to accelerate the restoration of South Florida, including ongoing restoration efforts in the Everglades and the Florida Keys where water quality and habitat are directly affected by land-based sources of pollution.

Statutory Authority:

Florida Keys National Marine Sanctuary and Protection Act of 1990; National Marine Sanctuaries Program Amendments Act of 1992; Clean Water Act; Water Resources Development Act of 1996; Water Resources Development Act of 2000; National Environmental Policy Act.

Geographic Program: San Francisco Bay

Program Area: Geographic Programs Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$6,718	\$8,922	\$12,004	\$3,082
Total Budget Authority	\$6,718	\$8,922	\$12,004	\$3,082
Total Workyears	2.0	1.8	1.8	0.0

Program Project Description:

The San Francisco Bay-Delta Estuary has long been recognized as an estuary of national importance by EPA, other federal agencies, state partners, and local stakeholders. The Bay Area, home to over 7 million people, is one of the densest urban areas in the nation. While historically, San Francisco Bay had about 200 thousand acres of mudflats and tidal marshes, over 90 percent of that was lost to diking and filling for agriculture and urbanization. San Francisco Bay supports 500 species of wildlife, more than a quarter of which are either threatened or endangered. Investing in wetland restoration is pivotal to the bay's resiliency to rising sea levels and other hydrologic changes.

Since 2008, EPA has received an annual appropriation for a competitive grant program, the San Francisco Bay Water Quality Improvement Fund (SFBWQIF), to support projects that protect and restore San Francisco Bay and advance Blueprint/Comprehensive Conservation and Management Plan (CCMP) restoration goals. Funding for the SFBWQIF is specifically targeted for the watersheds and shoreline areas of the nine San Francisco Bay Area counties that drain into the Bay. Since 2008, the SFBWQIF has invested over \$72.4 million in 59 grant awards to restore over four thousand acres of wetlands around the Bay and minimize polluted runoff from entering the San Francisco Bay. SFBWQIF grants have leveraged \$183 million in funding from partners and represents a collaborative investment with local partners guided by the consensus-based Blueprint/CCMP. The FY 2023 request will support increased investments in projects around San Francisco Bay that are designed for resiliency considering a wide range of climate change impacts. The Program will increase focus on historically underserved and overburdened communities through continued outreach and capacity building with partner organizations.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2023, EPA will focus on the following activities:

- Issue a Request for Applications soliciting proposals to restore wetlands, restore water quality, and implement green development practices that use natural hydrologic processes to treat polluted runoff around San Francisco Bay.
- Issue a Request for Applications soliciting proposals to support underserved populations in the Bay Area to improve the habitat and water quality in their local communities and improve the ease in which underserved community voices are included in the planning for regional environmental projects.
- Continue to administer the SF Bay Water Quality Improvement Fund, consistent with the San Francisco Estuary Partnership's (SFEP) Comprehensive Conservation and Management Plan (CCMP).²⁵⁴
- Continue to build the resilience of San Francisco Bay ecosystems, shorelines and communities to climate change and sea level rise.
- Continue to use EPA grants to fund climate resilient projects and improve access to funds for underserved communities.
- Provide funding and technical support to implement a new regional monitoring program for San Francisco Bay wetlands. The Wetlands Regional Monitoring Program will provide baseline data and include the following: a) Monitoring site network; b) Open data sharing platform; c) Comprehensive science framework.
- Continue technical support for the SF Bay Regional Monitoring Program (RMP), a 28-year-old partnership between regulatory agencies and the regulated community to provide a long-term data set and scientific foundation to make water quality management decisions. The RMP monitors water quality, sediment quality and bioaccumulation of priority pollutants in fish, bivalves and birds. To improve monitoring measurements or the interpretation of data, the RMP also regularly funds special studies.
- Seek to leverage other sources of funding such as the Clean Water State Revolving Fund and Federal Emergency Management Agency's pre-hazard mitigation funds in support of priority CCMP projects such as the San Francisco Estuary Partnership working with municipal partners on the Hayward Shoreline horizontal levee pilot project and the related "First Mile" project.
- Continue EPA's participation in the Bay Restoration Regulatory Integration Team (BRRIT), a five-year, multi-agency pilot effort to facilitate the complex permitting of restoration projects. The goal of BRRIT is for agencies with permitting jurisdiction over multi-benefit habitat restoration projects to improve the permitting process. BRRIT agencies use dedicated staff time to conduct early design review, provide written guidance and comments, identify Agency requirements that need to be met, and resolve regulatory issues early in the project planning and design phase. This permitting effort enables the accelerated implementation of our funded restoration projects.
- Continue to increase the reuse of dredged material for wetlands restoration, which is critical in preparing and responding to sea level rise in San Francisco Bay.
- Continue to partner with the academic and science organizations supporting the San Francisco Bay buoy array, partially funded by EPA, to monitor low-pH and low-oxygen events due to

²⁵⁴Please see the SFEP Comprehensive Conservation and Management Plan (2016) at https://www.sfestuary.org/wp-content/uploads/2017/08/CCMP-v26a-all-pages-web.pdf.

intrusion of upwelled water from the ocean and assessing its impacts, as well as watershed nutrient inputs.

The San Francisco Estuary restoration community is working rapidly to meet its goal of restoring 100,000 acres of wetlands that can provide flood protection, recreation, water quality improvement, and habitat for surrounding communities. Since 2008, approximately \$32 million of the SFBWQIF funds have been provided through grants to restore wetland habitat.

Key actions include continued partnerships with state and federal agencies to implement and track fourteen TMDLs, ²⁵⁵ provide technical assistance when asked by Delta stakeholders to sustain the Delta Regional Monitoring Program (RMP), and work towards continued integration of long-term data sets in the Bay and Delta, such as the Bay Regional Monitoring Program for water quality (RMP) and the Interagency Ecological Program.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (-\$2.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$3,084.0) This program change is an increase of resources that support projects to accelerate the restoration of the San Francisco Bay.

Statutory Authority:

Clean Water Act, Further Consolidated Appropriations Act, 2022, Pub. L. 117-103.

²⁵⁵ For more information, please see the SF Bay Delta TMDL Progress Assessment at http://www2.epa.gov/sfbay-delta/sf-bay-delta-tmdl-progress-assessment.

Geographic Program: Puget Sound

Program Area: Geographic Programs Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$32,946	\$33,750	\$35,016	\$1,266
Total Budget Authority	\$32,946	\$33,750	\$35,016	\$1,266
Total Workyears	6.2	7.0	7.0	0.0

Program Project Description:

Puget Sound is the southern portion of the international Salish Sea and is the largest estuary by water volume in the United States (U.S.). The Sound is an economic and cultural engine for the region's more than 4.7 million people, including nineteen federally recognized tribes. Nearly 71 percent of all jobs and 77 percent of total income in Washington State are found in the Puget Sound Basin. By 2040, the population is projected to grow to seven million, the equivalent of adding approximately four cities the size of Seattle to the watershed.

Puget Sound's beneficial uses are significant. In 2017, the value of Puget Sound commercial fishing (finfish and shellfish) was \$114 million, and the Gross Domestic Product from Puget Sound-related tourism and recreation activities was \$4.7 billion. Puget Sound's shellfish industry is considered the Nation's most valuable and is an important source of family wage jobs in economically challenged rural communities.

Development and land use conversion have adversely impacted the beneficial uses of Puget Sound's waters. For example, pollution and agricultural runoff reduce the safe harvest and consumption of shellfish across 143 thousand acres of shellfish beds and cause the closure of popular swimming beaches and recreational sites annually. Southern resident killer whales and 59 populations of Chinook salmon, steelhead, and bull trout are listed under the Endangered Species Act. Tribal nations also are unable to sustain their culture and way of life.

A healthy and functioning Puget Sound benefits all who live, visit, or recreate there, or have a connection to the region. A properly functioning ecosystem provides residents with food, water, and raw materials; regulates and moderates harmful elements; and provides cultural, spiritual, and recreational experiences.

Federal support of Puget Sound recovery comes from many programs, most of which are administered by EPA, the National Oceanic and Atmospheric Administration, the U.S. Department of Agriculture, U.S. Department of Interior, and the U.S. Army Corps of Engineers.

Since 2010, Congress has appropriated over \$400 million using Clean Water Act Section 320 authority for Puget Sound. Under Section 320, EPA has provided the National Estuary Program and Geographic Program funding and support to help communities make on-the-ground improvements for clean and safe water, protect and restore habitat, allow for thriving species and a vibrant quality of life for all, while supporting local jobs.

EPA's work with the Puget Sound Partnership, state agencies, tribes, and other partners has supported important gains in recovery. Examples include:

- Comprehensive regional plans to restore the Sound;
- More than \$1 billion of non-federal dollars leveraged for recovery;
- Partnerships with 19 federally recognized tribes;
- Transboundary collaboration with Canada;
- Scientific gains on toxic effects of urban stormwater;
- Development and use of decision-making tools to integrate Environmental Justice and Climate Adaptation plans and projects;
- Since 2007, a net increase of harvestable shellfish beds;
- Over 41 thousand acres of habitat protected and/or restored (cumulative from 2006); and
- More than six thousand acres of shellfish harvest bed upgraded (cumulative from 2007).

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

Key FY 2023 activities for EPA's Puget Sound Program include:

- EPA will fund assistance agreements with the 19 federally recognized tribes in Puget Sound, three Tribal consortia, and the Northwest Indian Fisheries Commission. EPA proposes to provide funding to tribes for both capacity building and implementing priority tribal projects in the Puget Sound basin.
- EPA will fund over 8 million in tribal projects to support key local watershed science and monitoring; local partnerships in restoration projects to support habitat and water quality; enhancement of ongoing programs and policies for recovery.
- EPA is a co-chair the overall federal effort to address Tribal Treaty Rights at Risk consistent with the roles assigned by the Council on Environmental Quality. This is an essential role for EPA and our federal leaders in the region to meaningfully engage and develop actions with our Puget Sound tribes to address their important treaty rights.
- The Program will build on 20 years of international cooperation with Canada implementing the Canada-U.S. Cooperation in the Salish Sea: 2021-2024 Action Plan. The Program will participate in a series of workshops on topics of shared interest in our transboundary work including joint efforts for Southern Resident Killer Whales, science collaboration and enhancing our transboundary governance opportunities.
- The FY 2023 budget request will help fulfill National Estuary Program responsibilities, including support for the implementation of the Comprehensive Conservation and Management Plan (CCMP) for recovering Puget Sound (the Action Agenda). The Program

²⁵⁶ For more information please see: https://www.epa.gov/puget-sound/actions-plans-us-canada-cooperation-salish-sea.

- will be receiving, reviewing, and approving the next CCMP in FY 2023 that will set up our next four years of collaborative implementation of recovery efforts in Puget Sound.
- The Program will integrate climate adaptation and environmental justice while supporting local jobs. The Program is building climate resiliency into the actions and projects funded with Puget Sound assistance agreements for habitat, shellfish and water quality, which presents the opportunity to grow and integrate climate justice in all of our program areas with federal, state, tribal and local partners.
- The Program will be managing and awarding up to \$100 million in projects from Puget Sound funding over the next five years consistent with the EPA's 2021 Strategic Initiative Lead Funding Model.²⁵⁷ The Program will fund over \$15 million in shellfish, habitat and stormwater projects and programs.
- The Program will continue to fund and coordinate cutting-edge science in the Salish Sea with funding over \$6 million in science projects from Puget Sound funding and programs with federal, state, tribal and academic partners.
- The Program will enhance Federal Task Force leadership, including leadership and implementation of the FY 2022-2026 Action Plan. This leverages hundreds of millions of federal investments in Puget Sound and provides alignment of program and policies for recovery.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$58.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$1,208.0) This program change is an increase of resources that supports federal, state, tribal, and local efforts to protect and restore the Puget Sound.

Statutory Authority:

Clean Water Act. Consolidated Appropriations Act, 2022, Pub. L. 117-103.

²⁵⁷ For more information please visit: https://snohomishcountywa.gov/DocumentCenter/View/87563/FY21-EPA-Funding-Guidance-to-SILs_FINAL.

Great Lakes Restoration

Program Area: Geographic Programs Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$306,380	\$330,000	\$340,111	\$10,111
Total Budget Authority	\$306,380	\$330,000	\$340,111	\$10,111
Total Workyears	71.6	68.5	68.5	0.0

Program Project Description:

The Great Lakes are the largest system of surface freshwater on Earth, containing twenty percent of the world's surface freshwater and 95 percent of the United States' (U.S.) surface freshwater. The watershed includes eight U.S. states, two Canadian provinces, and 35 tribes.

Through a coordinated interagency process led by EPA, the implementation of the Great Lakes Restoration Initiative (GLRI) is helping to restore the Great Lakes ecosystem. This restoration effort provides environmental and public health benefits to the region's thirty million Americans who rely on the Great Lakes for drinking water, recreation, and fishing. The restoration and protection of the Great Lakes also fuels local and regional economies and community revitalization efforts across the basin.

This interagency collaboration accelerates progress, promotes leveraging, avoids potential duplication of effort, and saves money. In accordance with the Clean Water Act (CWA), EPA and its partners are accomplishing this restoration through the implementation of a five-year GLRI Action Plan. The implementation of the GLRI Action Plan III, covering FY 2020 through FY 2024, began in October 2019.

EPA and its partners have achieved significant results since the GLRI started in 2010²⁵⁸, including:

- Five Areas of Concerns (AOCs) delisted, including the Ashtabula River AOC in FY 2021²⁵⁹:
- Eleven other AOCs have had the cleanup and restoration actions necessary for delisting completed;
- 97 Beneficial Use Impairments (BUIs) at 28 AOCs in the eight Great Lakes states have been removed, more than nine times the total number of BUIs removed in the preceding 22 years;
- Over 4.3 million cubic yards of contaminated sediment have been remediated;

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²⁵⁸ For more information, please see https://www.epa.gov/greatlakes.

²⁵⁹ Prior to GLRI, only one Great Lakes AOC was delisted.

- Over 200 thousand acres on which invasive species control activities have been implemented;
- Self-sustaining populations of Silver and Bighead carp have been kept out of the Great Lakes;
- Over 10 million pounds of invasive carp have been removed from the Illinois River, reducing the potential for this invasive species to invade the Great Lakes;
- Loadings of over 2 million pounds of phosphorus were reduced through implementation of conservation practices (phosphorus is a major driver of harmful algal blooms in Great Lakes priority watersheds);
- More than 460 thousand acres of habitat have been protected, restored, or enhanced; and
- Over 575 thousand youths have benefited from Great Lakes-based education and stewardship projects.

Under the GLRI, funds are first appropriated to EPA. After annual evaluation and prioritization consistent with the GLRI Action Plan, ²⁶⁰ EPA and its partner agencies collaboratively identify projects and programs that will best advance progress under GLRI. EPA then provides a substantial portion of the appropriated funds to its partner federal agencies to implement GLRI projects and programs in partnership with EPA, states, and tribes. EPA and its partner federal agencies will directly implement projects and fund projects performed by other entities such as states, tribes, municipalities, counties, universities, and nongovernmental organizations. GLRI funding can supplement each Agency's base funding.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2023, the GLRI will continue to support programs and projects which target the most significant environmental problems in the Great Lakes. Emphasis will continue to be placed on 1) cleaning up and delisting AOCs which has led to community revitalization, which is especially important in environmental justice communities and opportunity zones; 2) reducing phosphorus contributions that contribute to harmful algal blooms and other water quality impairments; and 3) invasive species prevention. GLRI Action Plan III targets GLRI restoration within the focus areas, objectives, and performance goals described below.

Toxic Substances and Areas of Concern Objectives:

• Remediate, restore, and delist AOCs. EPA, U.S. Fish and Wildlife Service (USFWS), U.S. Army Corps of Engineers (USACE), United States Geological Survey (USGS), National Oceanic and Atmospheric Administration (NOAA), and other GLRI partners will continue accelerating the pace of U.S. BUI removals. EPA and its federal partners will work with and fund stakeholders to implement management actions necessary to remove the BUIs (indicators of poor environmental health) that will ultimately lead to the delisting of the remaining U.S. AOCs. Agencies target collective efforts under the GLRI to maximize removal of BUIs and

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²⁶⁰ For more information please see https://www.glri.us/action-plan.

delisting of AOCs. Agencies will support BUI removal through sediment remediation under the Great Lakes Legacy Act (part of the GLRI) and other restoration activities. FY 2023 targets are:

- One AOC (20 AOCs cumulative since 1987) where all management actions necessary for delisting have been implemented;
- Nine BUIs (118 BUIs cumulative since 1987) removed in AOCs; and
- Two AOCs (28 AOCs cumulative since 1987 more than 80 percent of the 31 total AOCs) with complete and approved lists of management actions necessary for delisting.
- Share information on the risks and benefits of consuming Great Lakes fish, wildlife, and harvested plant resources with the people who consume them. Federal agencies and their state and tribal partners will continue to help the public make informed decisions about healthy options for safe fish consumption. Expansion of successful pilot programs will increase the availability and accessibility of safe fish consumption guidelines to overburdened and vulnerable communities that consume Great Lakes fish. Additional emphasis will be placed on the safe consumption of wildlife and harvested plant resources.
- Increase knowledge about "Chemicals of Mutual Concern", as identified pursuant to the Great Lakes Water Quality Agreement Annex, ²⁶¹ 3 and other priority chemicals that have negatively impacted, or have the potential to negatively impact, the ecological or public health of the Great Lakes. Federal agencies will coordinate with appropriate state and tribal partners to begin to fill critical monitoring and data gaps for priority chemicals in the Great Lakes. Monitoring data from this process will provide information on the magnitude and extent of these chemicals in the Great Lakes and help in the evaluation of associated ecological, economic, and recreational consequences.

Invasive Species Objectives:

- Prevent introductions of new invasive species. Federal agencies and their partners will continue to prevent new invasive species (including invasive carp) from establishing self-sustaining populations in the Great Lakes ecosystem. Federal agencies and their partners will work to increase the effectiveness of existing surveillance programs by increasing detection abilities. Federal agencies will continue to support state and tribal efforts to develop and implement Aquatic Nuisance Species Management Plans which will be used for annual "readiness exercises" and actual responses to new detections of invasive species. GLRI partners will be able to use risk assessments in combination with updated "least wanted" lists to focus prevention activities. Increasing the ability and frequency of Great Lakes states to quickly address new invasions or range expansion of existing invasive species will be a key GLRI strategy. In FY 2023, the goal is to conduct eight rapid responses or exercises.
- Control established invasive species. Federal agencies and their partners will bring an enhanced focus to the quality of acreage to be restored as they restore sites degraded by aquatic,

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²⁶¹ For more information please visit: https://www.epa.gov/glwqa/glwqa-annexes.

wetland, and terrestrial invasive species. Federal agencies will implement control projects in national forests, parks, and wildlife refuges, and will partner with states and neighboring communities to promote larger scale protection and restoration through applicable control programs. GLRI funding will help the Great Lakes Sea Lamprey Control Program to locate and address strategic barriers while also advancing new control technologies. In FY 2023, the target is to control invasive species on six thousand acres.

• Develop invasive species control technologies and refine management techniques. Federal agencies and their partners will continue to develop and enhance technologies to control non-native phragmites, sea lamprey, and red swamp crayfish so that on-the-ground land managers can field test these new approaches. Federal agencies also will develop and enhance invasive species "collaboratives" to support rapid responses and to communicate the latest control and management techniques for non-native species such as Hydrilla, Dreissenidae mussels, hemlock wooly adelgid, and emerald ash borer. Federal agencies and their partners will support a Great Lakes telemetry network to track aquatic invasive species movements (e.g., grass carp) and refine rapid response actions.

Nonpoint Source Pollution Impacts on Nearshore Health Objectives:

- Reduce nutrient loads from agricultural watersheds. EPA, federal agencies, and their partners will continue working on farms and in streams to reduce nutrient loads from agricultural watersheds, emphasizing utilization of conservation systems and work in priority watersheds, particularly the Lower Fox River (WI), Saginaw River (MI), Maumee River (OH), and Genesee River (NY). This work will reduce the most significant loadings from nutrient runoff. Federal agencies and their partners will improve the effectiveness of existing programs, encourage the adoption of technologies and performance-based approaches to reduce runoff and soil losses, expand demonstration farm networks to increase adoption of nutrient management practices, promote practices for slowing down and filtering stormwater runoff, and emphasize long-term and sustainable nutrient reductions. EPA and its federal partners will target resources and activities at locations that are the most significant cause of harmful algal blooms. In FY 2023, the targets are to:
 - Reduce 300 thousand pounds (2.5 million pounds cumulative since 2010) of phosphorus from conservation practice implementation throughout Great Lakes watersheds; and
 - 170 thousand acres (2.685 million acres cumulative since 2010) receiving technical or financial assistance on nutrient management in priority watersheds.
- Reduce untreated stormwater runoff. EPA and its federal partners will continue to accelerate implementation of green infrastructure projects to reduce the impacts of polluted urban runoff on nearshore water quality at beaches and in other coastal areas. These projects will capture or slow the flow of untreated runoff and filter out sediment, nutrients, toxic contaminants, pathogens, and other pollutants prior to entering Great Lakes tributaries and nearshore waters. Federal agencies and their partners also will continue to support watershed management projects that slow and intercept runoff, including installation of tributary buffers, restoration of coastal wetlands, and re-vegetation and re-forestation of areas near Great Lakes coasts and tributaries. In FY 2023, the targets are:

- Capture or treat 50 million gallons (500 million gallons cumulative since 2015) of untreated stormwater runoff captured or treated; and
- Restore or protect seven miles (54 miles cumulative since 2015) of Great Lakes shoreline and riparian corridors restored or protected.
- Improve effectiveness of nonpoint source control and refine management efforts. EPA and its federal partners will continue to adaptively manage to maximize nonpoint source control efforts. Strategies include conducting edge-of-field monitoring studies in agricultural priority watersheds to test the effectiveness of innovative practices such as bioreactors; application of previously supported tools and lessons learned to optimize project results; and development of new strategies such as nutrient recovery and manure transformation technologies. In FY 2023, the targets are:
 - Conduct 30 nutrient monitoring and assessment activities; and
 - Develop or evaluate ten nutrient or stormwater runoff reduction practices or tools.

Habitats and Species Objectives:

- Protect and restore communities of native aquatic and terrestrial species important to the Great Lakes. EPA and its federal partners will implement protection, restoration, and enhancement projects focused on open water, nearshore, connecting channels, coastal wetland, and other habitats to protect and restore native species. They will build upon and shore-up past investments while advancing protection and restoration in new areas important to targeted species. Projects will be largely based on priorities in regional scale conservation strategies and will include:
 - Protecting, restoring, and enhancing coastal wetlands;
 - Removing dams and replacing culverts to create fish habitat and reconnect migratory species to Great Lakes tributaries;
 - Restoring habitat necessary to sustain populations of migratory native species; and
 - Protecting, restoring, and managing existing wetlands and high quality upland areas to sustain diverse, complex, and interconnected habitats for species reproduction, growth, and seasonal refuge.

In FY 2023, the targets are:

- Restore, protect, or enhance 12 thousand acres of coastal wetland, nearshore, and other habitats; and
- Increase connectivity between rivers, streams, and lakes by 200 miles (6,300 miles cumulative since 2010) providing passage for aquatic species.
- Increase resiliency of species through comprehensive approaches that complement on-theground habitat restoration and protection. EPA and its federal partners will maintain, restore, and enhance the habitats of native fish and wildlife species to increase the resiliency and overall health of these species. Agencies will maximize habitat improvements (coastal wetlands in particular) for aquatic and terrestrial species through collaborative conservation and monitoring at local and regional scales. Project benefits are expected to include avoiding species extinction, identification of key habitats and of limiting factors to species recovery and increasing or protecting population levels. GLRI agencies and their partners will continue to

support protection of native species that have cultural, subsistence, and economic value. In FY 2023, the target is to complete actions to significantly protect or promote recovery of populations of two species (six species cumulative since 2018).

Foundations for Future Restoration Actions Objectives:

- Educate the next generation about the Great Lakes ecosystem. EPA and its federal partners will promote Great Lakes-based environmental education and stewardship for students and other interested community members (e.g., courses at parks, nature centers, on board vessels, museums, and zoos). With an emphasis on educating kindergarten through grade 12 youth, GLRI partners will support experience-based learning opportunities. GLRI agencies and their partners also will continue to develop Great Lakes-literate educators to maximize the number of youths impacted using principles and concepts in the Great Lakes Literacy curriculum. These activities will support the overall goal of impacting youth to foster Great Lakes stewardship, promote conservation, and expose and prepare under-represented youth for higher education opportunities in natural resource management.
- Conduct comprehensive science programs and projects. EPA and its federal partners will continue to investigate the most significant ecological problems in the Great Lakes. Great Lakes monitoring will include coastal wetlands, water quality, and the lower food web in the offshore waters; nutrient cycling and harmful algal blooms in priority areas; and contaminants in Great Lakes fish, sediments, and air. Federal agencies and their partners will identify and address science priorities to support implementation of the GLRI and the Great Lakes Water Quality Agreement. They will continue to: develop new tools for monitoring and forecasting; measure project effectiveness; prioritize management activities; and consider environmental and health outcomes.

GLRI Funding Allocations:

EPA leads the cooperative process to determine funding allocations for programs and projects of the GLRI agencies. Under the CWA Section 118, EPA provides the appropriate authorizing and appropriating committees of the Senate and the House of Representatives a yearly detailed description of the progress of the GLRI and amounts transferred to participating federal departments and agencies.

Summary of FY 2016 - 2023 Allocations* by Focus Area

(Dollars in Thousands)

Focus Area	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Toxic Substances and	\$106,600	\$107,500	\$105,600	\$107,400	\$116,900	\$121,400	\$121,400	\$138,600
AOC	-	-	-	-		•	-	
Invasive Species	\$56,400	\$62,200	\$56,700	\$57,000	\$62,900	\$65,700	\$65,700	\$60,700
Nonpoint Source Pollution	\$51,700	\$47,900	\$50,600	\$51,200	\$51,000	\$53,000	\$53,000	\$52,411
Impacts on Nearshore		-				•		
Health								
Habitat and Species	\$54,200	\$49,500	\$52,400	\$51,400	\$54,500	\$56,500	\$56,500	\$52,600
Foundations for Future	\$31,100	\$32,900	\$34,700	\$33,000	\$34,700	\$33,400	\$33,400	\$35,800
Restoration Actions								

^{*} Final allocations for FY 2016 – FY 2019. FY 2020 and FY 2021 allocations are based on budgets approved by Regional Working Group agencies. Allocations for FY 2022 and FY 2023 are subject to approval by Regional Working Group agencies. FY 2022 numbers reflect the Annualized Continuing Resolution amount.

Summary of FY 2016 - 2023 Allocations* by Agency

(Dollars in Thousands)

Agency	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
DHS-USCG	\$1,274	\$1,580	\$500	\$1,661	\$1,250	\$1,300	\$1,300	TBD
DOC-NOAA	\$30,740	\$12,027	\$24,629	\$29,405	\$28,163	\$16,800	\$16,800	TBD
DOD-USACE	\$33,369	\$55,940	\$43,559	\$37,387	\$30,665	\$48,128	\$48,128	TBD
DOI-BIA	\$6,203	\$10,904	\$11,617	\$9,842	\$15,840	\$15,765	\$15,765	TBD
DOI-NPS	\$3,799	\$4,379	\$3,940	\$3,822	\$3,794	\$4,993	\$4,993	TBD
DOI-USFWS	\$48,118	\$41,794	\$52,902	\$47,272	\$51,901	\$57,586	\$57,586	TBD
DOI-USGS	\$22,960	\$26,817	\$25,724	\$21,603	\$19,780	\$17,867	\$17,867	TBD
DOT-MARAD	\$2,106	\$800	\$675	\$803	\$5,500	\$8,000	\$8,000	TBD
HHS-ATSDR/CDC	\$1,692	\$593	\$590	\$0	\$0	\$0	\$0	TBD
USDA-APHIS	\$1,089	\$1,262	\$1,176	\$1,312	\$1,378	\$1,459	\$1,459	TBD
USDA-NRCS	\$19,062	\$22,072	\$25,096	\$20,697	\$22,239	\$24,374	\$24,374	TBD
USDA-USFS	\$10,822	\$11,355	\$10,153	\$11,646	\$9,921	\$12,464	\$12,464	TBD
Multi-agency	\$0	\$0	\$0	\$0	\$0	\$0	\$0	TBD
IA Totals:	\$181,234	\$189,522	\$200,560	\$185,448	\$190,432	\$208,736	\$208,736	TBD
EPA and Misc IAs	\$118,766	\$110,478	\$99,440	\$114,552	\$129,568	\$121,264	\$121,264	TBD
Totals:	\$300,000	\$300,000	\$300,000	\$300,000	\$320,000	\$330,000	\$330,000	\$340,111

^{*} Final allocations for FY 2016 – FY 2019. FY 2020 and FY 2021 allocations are based on budgets approved by Regional Working Group agencies. Allocations for FY 2022 and FY 2023 do not include adjustments that may be made in light of Bipartisan Infrastructure Law funding and are subject to approval by Regional Working Group agencies.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$304.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$9,807.0) This program change is an increase of resources that supports projects to accelerate the restoration of the Great Lakes.

Statutory Authority:

Clean Water Act Section 118.

Homeland Security

Homeland Security: Communication and Information

Program Area: Homeland Security Goal: Safeguard and Revitalize Communities Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$3,893	\$4,145	\$4,650	\$505
Total Budget Authority	\$3,893	\$4,145	\$4,650	\$505
Total Workyears	11.7	13.3	14.3	1.0

Program Project Description:

There has been an evolution of the term and mission of national and homeland security since 9/11. National security is now widely understood to include non-military dimensions, such as climate and environmental security, economic security, energy security, and cybersecurity. Systematic preparation is essential for the threats that pose the greatest risk to the security of the Nation, including acts of terrorism, climate change, pandemics, catastrophic natural disasters, and cyberattacks. The White House, Congress, and the Department of Homeland Security (DHS) have defined responsibilities for EPA in several areas, including water critical infrastructure protection and response to chemical, biological, radiological, and nuclear events, through a series of statutes, presidential directives, and national plans. EPA's Homeland Security: Communication and Information Program is comprised of the Office of Homeland Security (OHS), which supports the Agency's coordination and communication activities related to national security and homeland security and the Agency's Enterprise Security Operations Center (SOC), which is responsible for the centralized, integrated, and coordinated cybersecurity prevention, detection, response, and supporting recovery capability for EPA networks.

OHS provides technical, policy, and intelligence advice to senior agency leadership related to national and homeland security. OHS coordinates the Agency's intelligence activities including EPA's engagement with the White House, National Security Council (NSC), and other federal departments and agencies on the development of new national and homeland security policy and requirements. OHS also ensures that the NSC and other lead federal entities understand the impacts of new national security initiatives and policies on existing EPA programs. OHS maintains intelligence operations and analyses capabilities focusing on EPA's equities, including the protection of critical infrastructure, specifically the water sector, climate change and security issues, and biodefense and global health security issues. OHS serves as the Federal Intelligence Coordinating Office (FICO) for EPA and coordinates with the Intelligence Community (IC) in support of policy development and consequence management efforts. OHS also focuses on coordination and integration of chemical, biological, and radiological preparedness and response programs as they relate to the protection of air and water quality and the prevention of land contamination through external engagement with federal departments and agencies and internal coordination with EPA program offices with homeland security responsibilities. OHS coordinates

with regional, state, and local Fusion Centers and Joint Terrorism Task Forces to focus on integrating EPA regional offices with the information sharing environment and DHS' intelligence sharing network. OHS also advances implementation of the following programs: EPA Insider Threat, Suspicious Activity Reporting, National Operations Security (OPSEC), Counterintelligence, and Committee on Foreign Investment in the United States.

In addition, OHS works closely with EPA's Water Program to coordinate and integrate water security efforts internally and externally with stakeholders regarding physical threats and contamination and cyber threats to operations. EPA serves as the Sector Risk Management Agency (SRMA) for the water sector. The October 2020 DHS Homeland Threat Assessment and the 2021 Annual Threat Assessment of the U.S. Intelligence Community (IC) (April 2021)²⁶² indicated that cyber threats from nation states and non-nation states remain an acute growing problem threatening U.S. critical infrastructure. Cyberattacks across critical infrastructure sectors are rapidly increasing in volume and sophistication, impacting both information technology (IT) and operational technology (OT) systems in the water sector.

EPA's SOC provides a centralized, integrated, and coordinated cybersecurity incident response capability that defends against unauthorized activity within computer networks, by preventing, detecting, monitoring, analyzing, and responding to suspicious or malicious activity through its Computer Security Incident Response Capability (CSIRC). The SOC and CSIRC also provide: situational and threat awareness; cyber network defense infrastructure; cybersecurity tool engineering and support; vulnerability and risk assessments; and threat intelligence processing and threat hunting capabilities. The SOC leverages endpoint detection and response and other capabilities to perform its mission. The SOC maintains communications with DHS' Liaison Officers to respond to alerts that have potential national security impact.

National and homeland security information technology efforts are closely coordinated with the agencywide information security and infrastructure activities, which are managed by EPA's Information Security and IT/Data Management programs. These IT support programs also enable contact among localities, EPA program and regional offices, and laboratories in emergency situations.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the *FY 2022 - 2026 EPA Strategic Plan*. With the resources requested in FY 2023, this program will:

• Continue to promote a coordinated approach to EPA's homeland security activities and support the alignment of resources with government-wide national and homeland security priorities and requirements as defined by the NSC and the IC, including climate security, cybersecurity, and biodefense.

https://www.dni.gov/files/ODNI/documents/assessments/ATA-2021-Unclassified-Report.pdf

²⁶² Please see the following for more information: https://www.dhs.gov/sites/default/files/publications/2020_10_06_homeland-threat-assessment.pdf

- Continue to build on and develop the Agency's cybersecurity intelligence capabilities to provide a level of support that would enable EPA to better prepare for and respond timely to specific threats, mitigate attacks, assess evolving water sector cyber intelligence requirements, and assist in developing proposals to prevent/mitigate cyber incidents. By further building these capabilities, the Agency will be able to increase research, analyses, and engagement with the water and wastewater sector and partner agencies who deal with cybersecurity (i.e., DHS Cybersecurity and Infrastructure Security Agency (CISA)) and help EPA fulfill the requirements in Section 9002 of the FY 2021 National Defense Authorization Act. All indicators suggest cybersecurity threats and requirements, particularly those associated with the critical infrastructure sector, will only increase in number, complexity, and potential consequences for the foreseeable future.
- OHS and EPA's Water Program will develop an integrated strategy to work together more effectively to coordinate water and wastewater sector-wide cybersecurity threat information and intelligence sharing efforts. Specific examples of OHS' roles/responsibilities in this area include:
 - Engaging with the Water Sector Coordinating Council and the Water Information Sharing and Analysis Center (ISAC) to more closely work with CISA and the intelligence and law enforcement communities to facilitate access to, and exchange of, information and intelligence necessary to strengthen the security of critical infrastructure to obtain threat information and intelligence related to the water and wastewater sector to support emergency preparedness and planning efforts in a more timely manner;
 - Supporting risk assessment and risk management efforts by EPA in conjunction with CISA;
 - Engaging with the Water Sector Coordinating Council and the Water ISAC to more closely work with CISA and the intelligence and law enforcement communities to facilitate the identification of intelligence requirements and priorities of critical infrastructure owners and operators in the water and wastewater sector in coordination with the Director of National Intelligence and the heads of other Federal departments and agencies, as appropriate; and
 - Working with CISA to provide and facilitate awareness, within the water and wastewater sector, of ongoing, and where possible, real-time awareness of identified threats, vulnerabilities, mitigations, and other actions related to the security of the water and wastewater sector.
- Continue to develop new collaborative practices and methods with Intelligence Community agencies to meet the cybersecurity needs of the water and wastewater sector, along with other critical sectors, to address increasingly sophisticated and complex threat actor tactics and techniques. EPA has coordinated with NSC, CISA, and the water sector on several occasions regarding cyber-attacks on the water sector's IT and OT systems,

which has resulted in a renewed emphasis on notification and communication efforts with the water utilities.

- Continue to develop new collaborative practices and methods with Intelligence Community agencies and the National Security Council to meet the requirement in Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*, ²⁶³ "to place the climate crisis at the forefront of this Nation's foreign policy and national security planning."
- Continue to develop new collaborative practices and methods with Intelligence Community agencies and the National Security Council to address emerging domestic and global biological risks, including pandemics and national bio-preparedness policies.
- Continue to engage with CISA's Intelligence and Analysis Branch for greater information sharing and engagement. OHS has developed a new partnership with the National Security Agency office providing cybersecurity support to critical infrastructure agencies.
- Provide more comprehensive support to the expanding collaborations with DOE, CISA, WaterISAC, and other programs on cyber threat response.
- Promote a coordinated approach to communicating classified and sensitive information to EPA programs, laboratories, and regional offices via secure communications systems to support timely intelligence and information sharing to enable safe and effective operational preparedness and response.
- Support federal, state, tribal, and local efforts to prevent, protect, mitigate, respond to, and recover from the impacts of natural disasters, acts of terrorism, and other emergencies by providing leadership and coordination across EPA's program offices and regions.
- Ensure appropriate agency representation in various White House and other federal national security and homeland security policy activities. These efforts include serving as EPA's representative for homeland security, national disaster response, and mitigation and recovery policy in monthly meetings of the Homeland Preparedness and Response Interagency Policy Committee (IPC), the Homeland Critical Infrastructure Resilience Interagency Policy Committee, chaired by the NSC, and in weekly NSC Cyber Response Group meetings and other national security policy committees. In addition, OHS serves as EPA's representative in monthly meetings of the Recovery Support Function Leaders Group, chaired by the Federal Emergency Management Agency (FEMA), and the Mitigation Framework Leadership Group, also chaired by FEMA, and on other interagency workgroups.
- Focus on filling critical policy, knowledge, and technology gaps that may be essential for an effective EPA response, including working with our interagency partners to define

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²⁶³ For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/

collective capabilities and resources that may contribute to closing common homeland security gaps, including emerging chemical threats and cybersecurity concerns for critical water infrastructure.

- Provide EPA end-users with relevant, accurate, reliable, objective, and timely intelligence
 bearing on matters of environmental policy and regulation and domestic threats and
 counterintelligence, where EPA functions to preserve or assist in the restoration of human
 health and the environment.
- Continue phased implementation of Executive Order 13587, Structural Reforms to Improve the Security of Classified Networks and the Responsible Sharing and Safeguarding of Classified Information²⁶⁴ to meet the main pillars of classified information protection with a focus on the implementation of an Insider Threat Program to address and mitigate threats to national security.
- Track emerging national and homeland security issues, through close coordination with the U.S. Intelligence Community, to anticipate and avoid crisis situations and target the agency's efforts proactively against threats to the United States.
- Phase in National Security Presidential Memorandum 28 (NSPM-28) to support OPSEC for the agency.
- Support the coordination and communication requirements of NSPM-32 to share information on critical incidents in a timely and effective manner.

In FY 2023, EPA also will support implementation of Executive Order 14028, *Improving the Nation's Cybersecurity*²⁶⁵ through monitoring across the Agency's IT infrastructure to detect, remediate, and eradicate malicious activity/software from EPA's computer and data networks. Specific activities include:

- Continue to enhance internal Computer Security Incident Response Capability to ensure rapid identification and reporting of suspicious activity through increased training and awareness of cybersecurity threats. Training opportunities are provided to individual users to identify the most recent cybersecurity threats along with tabletop exercises to develop agency staff proficiency in responding to cyber security incidents.
- Improve threat intelligence sharing. EPA personnel are active participants in the United States Computer Emergency Readiness Team, a DHS-led group of experts from incident response and security response teams. Indicators and warnings are shared between EPA incident responders and their cleared counterparts in other agencies and with the Intelligence Community. This provides the ability to integrate actionable intelligence with deployed systems to improve cybersecurity defensive capabilities.

structural-reforms-improve-security-classified-net.

265 For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/05/12/executive-order-on-improving-the-nations-cybersecurity/

²⁶⁴ For more information, please see: https://obamawhitehouse.archives.gov/the-press-office/2011/10/07/executive-order-13587-structural-reforms-improve-security-classified-net.

- Continue maturation and refinement of Agency's Incident Response procedures in compliance with CISA's Playbook for Responding to Cybersecurity Vulnerabilities and Incidents.
- Continue work to integrate End Point Detection and Response (EDR) capabilities with the
 Continuous Diagnostics and Mitigation Program to support proactive detection of
 cybersecurity incidents within the EPA information environment, supporting active cyber
 hunting, containment and remediation, and incident response. This work includes extensive
 coordination with CISA and deployment of capabilities across the Agency to meet the
 requirements in OMB Memorandum M-22-01.²⁶⁶
- Mature the security logging capabilities as outlined in OMB Memorandum M-21-31,²⁶⁷ "Improving the Federal Government's Investigative and Remediation Capabilities Related to Cybersecurity Incidents." EPA is on track to comply with the system logging requirements in FY 2023 to meet Event Logging (EL) level 2 for Intermediate Logging requirements of highest and intermediate criticality and EL level 3 for Advanced Logging requirements at all criticality levels.
- In compliance with OMB Memorandum M-22-09,²⁶⁸ "Moving the U.S. Government Toward Zero Trust Cybersecurity Principles," the SOC will support the implementation of a Zero Trust Architecture across the Agency.
- Continue to mature and refine the Vulnerability Disclosure Program (VDP) in compliance with Binding Operational Directive (BOD) 20-01, ²⁶⁹ "Develop and Publish a Vulnerability Disclosure Policy." The Agency will increase the scope of the program and improve response capabilities to expedite remediation and improve status reporting.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$120.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

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²⁶⁶ For additional information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/10/M-22-01.pdf?ref=hackernoon.com

^{01.}pdf?ref=hackernoon.com

267 For additional information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/08/M-21-31-Improving-the-Federal-Governments-Investigative-and-Remediation-Capabilities-Related-to-Cybersecurity-Incidents.pdf

²⁶⁸ For additional information, please see: https://www.whitehouse.gov/wp-content/uploads/2022/01/M-22-09.pdf

²⁶⁹ For additional information, please see: https://cyber.dhs.gov/assets/report/bod-20-01.pdf

• (+\$385.0 / +1.0 FTE) This program change is an increase in resources and FTE to support the Agency's homeland security coordination and intelligence efforts. This includes \$205.0 thousand in payroll.

Statutory Authority:

Resource Conservation and Recovery Act, §§ 1001, 2001, 3001, 3005; Safe Drinking Water Act; Clean Water Act, §§ 101, 102, 103, 104, 105, 107; Clean Air Act, §§ 102, 103, 104, 108; Toxic Substances Control Act, §§ 201, 301, 401; Federal Insecticide, Fungicide, and Rodenticide Act, §§ 136a-136y; Bio Terrorism Act of 2002, §§ 303, 305, 306, 307; Homeland Security Act of 2002; Post-Katrina Emergency Management Reform Act; Defense Against Weapons of Mass Destruction Act; and Food Safety Modernization Act, § 208.

Homeland Security: Critical Infrastructure Protection

Program Area: Homeland Security Goal: Safeguard and Revitalize Communities Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$733	\$909	\$1,014	\$105
Science & Technology	\$9,653	\$10,380	\$14,526	\$4,146
Total Budget Authority	\$10,386	\$11,289	\$15,540	\$4,251
Total Workyears	23.7	26.6	32.6	6.0

Program Project Description:

The Critical Infrastructure Protection Program supports EPA's efforts to coordinate and provide technical expertise to enhance the protection of the Nation's critical water infrastructure from terrorist threats and all-hazard events through effective information sharing and dissemination. This program provides water systems with current information on methods and strategies to build preparedness for natural and man-made threats.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the FY 2022 - 2026 EPA Strategic Plan. The Program also will support the Agency's Infrastructure Investment and Jobs Act implementation priorities including preparing for and responding to cybersecurity challenges so that water systems are more resilient.

In FY 2023, EPA will build the capacity at water systems to identify and respond to threats to critical national water infrastructure by:

- Providing timely information on contaminant properties, water treatment effectiveness, detection technologies, analytical protocols, and laboratory capabilities;
- Supporting effective communication conduits to disseminate threat and incident information and to serve as a clearinghouse for sensitive information;
- Promoting information sharing between the water sector and environmental professionals, scientists, emergency services personnel, law enforcement, public health agencies, the intelligence community, and technical assistance providers. Through this exchange, water systems can obtain up-to-date information on current technologies in water security, accurately assess their vulnerabilities to terror acts, and work cooperatively with public health officials, first responders, and law enforcement officials to respond effectively in the event of an emergency;

- Providing water utilities, of all sizes, with access to a comprehensive range of important materials, including the most updated information, tools, training, and protocols designed to enhance the security (including cybersecurity), preparedness, and resiliency of the water sector (including addressing natural hazards, including climate change); and
- Ensuring that water utilities receive timely and informative alerts about changes in the homeland security advisory level and regional and national trends in certain types of water-related incidents. For example, should there be types of specific, water-related threats or incidents that are recurring, EPA, in coordination with the Department of Homeland Security and other appropriate agencies, will alert utilities of the increasing multiple occurrences of or trends in these incidents.

Effective information sharing protocols allow the water sector to improve its understanding of the latest water security and resiliency protocols and threats. These protocols reduce risk by enhancing the water sector's ability to prepare for an emergency.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act (SDWA) implementation and compliance and performance results in the Drinking Water Programs, under the EPM appropriation, to support safe drinking water for the Nation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$10.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$95.0) This program change is an increase in resources to support the protection of critical water infrastructure.

Statutory Authority:

Safe Drinking Water Act, §§ 1431-1435; Clean Water Act; Public Health Security and Bioterrorism Emergency and Response Act of 2002; Emergency Planning and Community Right-to-Know Act, §§ 301-305.

Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security Goal: Safeguard and Revitalize Communities Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$4,915	\$4,959	\$5,139	\$180
Science & Technology	\$500	\$501	\$501	\$0
Building and Facilities	\$7,006	\$6,676	\$6,676	\$0
Hazardous Substance Superfund	\$845	\$1,030	\$1,530	\$500
Total Budget Authority	\$13,266	\$13,166	\$13,846	\$680
Total Workyears	9.2	9.2	9.2	0.0

Total workyears in FY 2023 include 9.2 FTE to support Homeland Security Working Capital Fund (WCF) services.

Program Project Description:

Environmental Programs and Management resources for the Homeland Security: Protection of EPA Personnel and Infrastructure Program ensure that EPA maintains a robust physical security and preparedness infrastructure, ensuring that its numerous facilities are secured and protected in line with the federally mandated Interagency Security Committee standards.

In order to secure and protect EPA's personnel and physical infrastructure, the Agency operates a USAccess Personal Identity Verification (PIV) program, which adheres to the requirements as set forth in Homeland Security Presidential Directive-12 (HSPD-12).²⁷⁰ This program ensures the Agency complies with government-wide standards for the issuance of secure and reliable forms of identification to federal employees and contractors who require access to federally controlled facilities and networks. Additionally, EPA's National Security Information (NSI) Program manages and safeguards EPA's classified information for its federal workforce and contractors. Through the NSI program, EPA initiates and adjudicates personnel background investigations, processes fingerprint checks, determines individual eligibility to access classified NSI, maintains personnel security records for all federal and non-federal employees, and conducts federally mandated training and NSI inspections.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the FY 2022 - 2026 EPA Strategic Plan.

As part of the nationwide protection of buildings and critical infrastructure, EPA performs vulnerability assessments on facilities each year. Through this program, the Agency also

²⁷⁰ For additional information, please see: https://www.dhs.gov/homeland-security-presidential-directive-12.

recommends security risk mitigations, oversees access control measures, determines physical security measures for new construction and leases, and manages the lifecycle of security equipment.

In FY 2023, EPA will continue to partner with the General Services Administration (GSA) on the Enterprise Physical Access Control System (ePACS). ePACS supports the Agency's modernization of its security infrastructure in compliance with HSPD-12 and ensures that the Agency is undertaking every effort to enhance safety, security, and efficiency by more effectively controlling access into all EPA-controlled physical space and networks. In addition, the Agency will continue to utilize GSA's Managed Service Office program, *USAccess*, for PIV card enrollment and issuance. *USAccess* is a GSA managed, shared services solution that provides EPA the ability to produce and maintain secure and reliable forms of identification, as required per HSPD-12, for all EPA employees and contractors.

EPA complies with 5 CFR 1400, which requires that federal and non-federal positions are designated for both risk and sensitivity and that personnel have appropriate background investigations commensurate with their position's risk and sensitivity designation. EPA will continue to manage the personnel security, suitability, fitness, and NSI programs and conduct background investigations following appropriate federal guidance, ensuring that personnel are properly investigated for the positions they encumber and that classified material and activity is properly handled. As federal guidelines and policies change or are introduced, the systems supporting background investigations and the NSI Program will be updated and enhanced as needed.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$180.0) This program change supports the protection of EPA personnel and infrastructure. These funds will support ePACS and the Agency's modernization of its security infrastructure efforts to control access into all EPA-controlled physical space and networks.

Statutory Authority:

Intelligence Reform and Terrorism Prevention Act of 2004; Privacy Act of 1974; REAL ID Act of 2005; Homeland Security Act of 2002; Americans with Disabilities Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Indoor Air and Radiation

Indoor Air: Radon Program

Program Area: Indoor Air and Radiation Goal: Ensure Clean and Healthy Air for All Communities Objective(s): Reduce Exposure to Radiation and Improve Indoor Air

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$2,224	\$3,136	\$5,004	\$1,868
Science & Technology	\$112	\$157	\$157	\$0
Total Budget Authority	\$2,336	\$3,293	\$5,161	\$1,868
Total Workyears	8.8	9.0	12.4	3.4

Program Project Description:

Title III of the Toxic Substances Control Act (TSCA) authorizes EPA to take a variety of actions to address the public health risk posed by exposure to indoor radon. Under the statute, EPA studies the health effects of radon, assesses exposure levels, sets an action level, provides technical assistance to states, industry, and the public, advises the public of steps they can take to reduce exposure, and promotes the availability of reliable radon services and service providers to the public.

Radon is the second leading cause of lung cancer in the United States – and the leading cause of lung cancer mortality among non-smokers – accounting for about 21,000 deaths per year. The EPA's non-regulatory Indoor Air: Radon Program promotes actions to reduce the public's health risk from indoor radon. EPA and the Surgeon General recommend that people do a simple home radon test and, if levels above the EPA's guidelines are confirmed, reduce elevated levels by home mitigation using inexpensive and proven techniques. EPA also recommends that new homes be built using radon-resistant features in areas where there is elevated radon. Nationally, risks from radon have been reduced in many homes over the years, but many homes are still in need of mitigation. This voluntary program promotes partnerships among national organizations, the private sector, and more than 50 state, local, and tribal governmental programs to reduce radon risk.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2023, EPA is requesting additional resources to support restoration of core capacity in this Program, including building up staff expertise and analytical capabilities.

²⁷¹ https://www.epa.gov/radon.

EPA will continue to lead the federal government's response to radon and to implement the Agency's own multi-pronged radon program. Work in this program supports the President's priority of advancing environmental justice. EPA will drive action at the national level to reduce radon risk in homes and schools through the National Radon Action Plan, partnerships with the private sector and public health groups, technical assistance to states and industry, public outreach, and education activities. The Agency will encourage radon risk reduction as a normal part of doing business in the real estate marketplace, will promote local and state adoption of radon prevention standards in building codes, and will participate in the development of national voluntary standards (e.g., mitigation and construction protocols) for adoption by states and the radon industry. EPA will continue working to update the framework that ensures a quality, credentialed radon workforce.

Performance Measure Targets:

(PM LCD) Number of lung cancer deaths prevented through lower radon	FY 2022	FY 2023
exposure.	Target	Target
	1,881	1,962

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$101.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$1,767.0 / +3.4 FTE) This increase in resources supports efforts to restore EPA's staff expertise, analysis, and capacity in the indoor air radon program in order to better lead the federal government's response to radon and to implement the Agency's own multi-pronged radon program. This investment includes \$647.0 thousand in payroll.

Statutory Authority:

Title III of the Toxic Substances Control Act (TSCA); Title IV of the Superfund Amendments and Reauthorization Act (SARA); Clean Air Act.

Radiation: Protection

Program Area: Indoor Air and Radiation Goal: Ensure Clean and Healthy Air for All Communities Objective(s): Reduce Exposure to Radiation and Improve Indoor Air

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$8,283	\$7,661	\$10,588	\$2,927
Science & Technology	\$1,645	\$1,735	\$2,224	\$489
Hazardous Substance Superfund	\$1,973	\$1,985	\$2,872	\$887
Total Budget Authority	\$11,901	\$11,381	\$15,684	\$4,303
Total Workyears	60.0	53.8	66.7	12.9

Program Project Description:

EPA has general and specific duties to protect human health and the environment from harmful and avoidable exposure to radiation under multiple statutes. EPA's Radiation Protection Program carries out these responsibilities through its federal guidance and standard-setting activities, including: regulatory oversight and implementation of radioactive waste disposal standards for the Department of Energy's (DOE) Waste Isolation Pilot Plant (WIPP); the regulation of airborne radioactive emissions; general disposal standards for nuclear waste repositories; and the development and determination of appropriate methods to measure and to model radioactive releases and exposures under Section 112 of the Clean Air Act. The Radiation Protection Program also supports EPA, state, local and tribal authorities by providing radiation protection scientific analyses and recommendations needed to inform risk management policies, and the necessary radiation risk communications expertise to support local community engagement on issues related to legacy contamination and environmental justice needs.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the FY 2022 - 2026 EPA Strategic Plan.

EPA will meet its statutory obligation to implement its regulatory oversight responsibilities for DOE activities at the WIPP facility, as mandated by Congress in the WIPP Land Withdrawal Act of 1992. In FY 2023, EPA anticipates conducting a detailed review of the DOE request for expanding the WIPP repository to address needs for more waste disposal area, permitting disposal of previously identified transuranic waste as well as more recently identified needs for disposal of surplus plutonium. EPA will review and implement regulations or guidance, as necessary. The Agency also will provide technical and policy analysis supporting scientific goals for space exploration. EPA serves on the Interagency Nuclear Safety Review Board with NASA and DOD to provide launch safety analysis. EPA scientists will participate, as appropriate, in interagency working groups to examine issues of low-dose radiation health impacts and identify any needed

changes to existing technical and policy guidance. EPA radiation risk communicators will provide radiation-related website and communications product content that is clear and accessible to the general public, including those with limited English proficiency.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$315.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,612.0 / +8.3 FTE) This program change is an increase that supports efforts to restore EPA's staff expertise, analysis, and capacity in the radiation protection program to provide radiation protection scientific analyses and recommendations needed to inform risk management policies. It also supports the necessary radiation risk communications expertise for local community engagement on issues related to legacy contamination and environmental justice needs. This investment includes \$1.485 million in payroll.

Statutory Authority:

Atomic Energy Act of 1954; Clean Air Act; Energy Policy Act of 1992; Nuclear Waste Policy Act of 1982; Public Health Service Act; Safe Drinking Water Act; Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978; Waste Isolation Pilot Plant Land Withdrawal Act of 1992; Marine Protection, Research, and Sanctuaries Act; Clean Water Act.

Radiation: Response Preparedness

Program Area: Indoor Air and Radiation Goal: Ensure Clean and Healthy Air for All Communities Objective(s): Reduce Exposure to Radiation and Improve Indoor Air

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$2,703	\$2,404	\$3,004	\$600
Science & Technology	\$3,063	\$3,096	\$4,383	\$1,287
Total Budget Authority	\$5,766	\$5,500	\$7,387	\$1,887
Total Workyears	32.1	33.3	41.4	8.1

Program Project Description:

EPA generates policy guidance and procedures for the Agency's radiological emergency response under the National Response Framework (NRF) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The Agency maintains its own Radiological Emergency Response Team (RERT) and is a member of the Department of Homeland Security/Federal Emergency Management Agency Federal Radiological Preparedness Coordinating Committee (FRPCC) and the Federal Advisory Team for Environment, Food and Health (the "A-Team"). The A-Team includes radiation protection experts from EPA, the Centers for Disease Control and Prevention, the Food and Drug Administration and the Department of Agriculture, and their function is to advise federal, state, local and tribal authorities during radiological/nuclear emergencies on public safety issues including evacuation, sheltering, and contamination concerns for food, drinking water and other resources. EPA continues to respond to radiological emergencies; conducts essential national and regional radiological response planning and training; and develops response plans for radiological incidents or accidents.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA will continue to streamline activities and fill gaps in the expertise that is critical for essential preparedness work, restoring critical capacity to meet EPA's core mission. The RERT will maintain essential readiness to support federal radiological emergency response and recovery operations under the NRF and NCP. EPA will participate in interagency training and exercises to maintain readiness levels needed to fulfill EPA's responsibilities.

Evaluation of Response Plans

In FY 2023, EPA will continue to work with interagency partners, including those under the FRPCC as well as those at the state, local and tribal levels to examine and, as needed, revise radiation emergency response plans, protocols, and standards. Under the NRF, EPA is the coordinating

agency for responding to foreign nuclear incidents, such as the Fukushima accident. In FY 2023, EPA will maintain staff readiness and training needed to meet the Agency's mission during such incidents. EPA will review and revise preparedness guidance to ensure that the Agency's response efforts address the needs of the public, with special emphasis on the most vulnerable. EPA will support the U.S. Government assessment of foreign nuclear technology used in space nuclear systems and advanced reactor technologies. Building on efforts started in FY 2022, EPA will continue work on the safety evaluation of the National Aeronautics and Space Administration's DRACO mission for potential impacts to human health and the environment and begin contingency planning for its mission launch, scheduled for 2025.

Coordinating Preparedness Efforts

EPA will continue essential planning and will participate in interagency table-top and field exercises, including radiological accident and incident response and anti-terrorism activities with The Advisory Team for Environment, Food, and Health, the Nuclear Regulatory Commission, the Department of Energy, the Department of Defense, and the Department of Homeland Security. The Agency also will provide technical support on priority issues to federal, state, local and tribal radiation, emergency management, solid waste and health programs responsible for implementing radiological emergency response and preparedness programs. The Agency will continue to train and advise on the Protective Action Guidance²⁷² and use lessons learned from incidents and exercises to ensure the effective delivery of EPA support in coordination with other federal, state, local and tribal authorities.

Performance Measure Targets:

(PM RAD2) Percentage of radiation emergency response program	FY 2022	FY 2023
personnel and assets that meet functional readiness requirements necessary	Target	Target
to support federal radiological emergency response and recovery operation.	90	92

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$36.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$564.0 / +3.1 FTE) This net program change is an increase that supports efforts to restore EPA's staff expertise, analysis, and capacity in the radiation response program in order to examine and, as needed, revise radiation emergency response plans, protocols, and standards and continue essential planning for preparedness efforts. This investment includes \$565.0 thousand in payroll.

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²⁷² For additional information, please see: https://www.epa.gov/sites/production/files/2017-01/documents/epa pag manual final revisions 01-11-2017 cover disclaimer 8.pdf.

Statutory Authority:

Homeland Security Act of 2002; Atomic Energy Act of 1954; Clean Air Act; Post-Katrina Emergency Management Reform Act of 2006 (PKEMRA); Public Health Service Act (PHSA); Robert T. Stafford Disaster Relief and Emergency Assistance Act; Safe Drinking Water Act (SDWA).

Reduce Risks from Indoor Air

Program Area: Indoor Air and Radiation Goal: Ensure Clean and Healthy Air for All Communities Objective(s): Reduce Exposure to Radiation and Improve Indoor Air

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$10,968	\$11,750	\$23,542	\$11,792
Science & Technology	\$296	\$161	\$173	\$12
Total Budget Authority	\$11,264	\$11,911	\$23,715	\$11,804
Total Workyears	40.8	37.2	68.1	30.9

Program Project Description:

Title IV of the Superfund Amendments and Reauthorization Act of 1986 (SARA) authorizes EPA to conduct and coordinate research on indoor air quality, develop and disseminate information, and coordinate risk reduction efforts at the federal, state, and local levels. Poor indoor air quality represents one of the largest risks in EPA's portfolio. PA uses a range of strategies to reduce health risks from poor indoor air quality in homes, schools, and other buildings through partnerships with non-governmental, professional, federal, state and local organizations. Through these partnerships EPA provides information, guidance and technical assistance that equips industry, the health care community, the residential, school and commercial building sectors, and the general public to take action. As technical experts working at the intersection of the built environment and health, EPA is focused on policy and guidance to improve building conditions, including for disproportionately impacted communities, to reduce indoor air risk and achieve improvements in environmental and health outcomes.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Indoor Air Program will include efforts targeted to children, underserved communities and other vulnerable populations, with a particular focus on new demands and opportunities for improvements in ventilation, filtration, and other protective indoor air practices, including those created by the COVID-19 pandemic and wildfire events. EPA will continue to lead on these issues by providing technical assistance and guidance on upgrading public buildings including schools to protect against airborne disease transmission and wildfire smoke exposure and provide guidance to the general public to reduce harmful exposures indoors, emphasizing that these upgrades will be beneficial to not only pandemic preparedness and disaster resilience, but also improved public health in the long-term.

²⁷³ https://www.epa.gov/iaq.

Additionally, EPA will collaborate with public and private sector organizations to provide clear and verifiable protocols and specifications for promoting good indoor air quality and support adoption of these protocols and specifications into existing healthy, energy efficiency, and green building programs and initiatives to promote healthy buildings for a changing climate. EPA also will equip the housing sector with guidance to promote the adoption of these best practices with the aim of creating healthier, more energy efficient homes, including for low-income families. EPA also will equip school leaders to make science-based decisions and implement sustainable ventilation, filtration and other indoor air quality improvements for healthy school environments. EPA will build the capacity of community-based organizations to provide comprehensive asthma care that integrates management of indoor environmental asthma triggers and health care services, with a particular focus on low-income, minority, and tribal communities. Through FY 2021, EPA has equipped 1,600 programs to support the infrastructure, delivery, and sustainability of comprehensive asthma care. Through FY 2023, EPA will equip an additional 2,100 programs.

Internationally, EPA will renew support of the household energy sector, providing technical assistance and promoting the adoption of voluntary international stove standards to accelerate adoption of clean cookstoves and fuels, in order to reduce the climate, health, and equity impacts of rudimentary stove use in developing nations. EPA will work with partners to increase the sustained use of clean and efficient cookstoves by helping ensure the distribution of 60 million clean cookstoves worldwide in FY 2023.

Performance Measure Targets:

(PM IA) Number of additional programs, annually, equipped to support the infrastructure, delivery and sustainability of comprehensive asthma care.	FY 2022 Target	FY 2023 Target
, , ,	1,800	2,100
(PM CS) Millions of demonstrably improved (field or lab tested) cookstoves	FY 2022	FY 2023
sold.	Target	Target

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$400.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$11,392.0 / +30.9 FTE) This program change is an increase that supports efforts to restore EPA's staff expertise, analysis, and capacity in the indoor air program. Funds also support efforts to address indoor air quality during wildfires, to reduce asthma disparities, to promote healthy school facilities in low-income communities in the U.S., and to address the international climate crisis by improving public health through the adoption of clean cookstoves. This investment includes \$5.606 million in payroll.

Statutory Authority:

Title IV of the Superfund Amendments and Reauthorization Act (SARA); Title III Toxic Substances Control Act; Clean Air Act.

Information Exchange

Children and Other Sensitive Populations: Agency Coordination

Program Area: Information Exchange / Outreach Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$8,277	\$6,173	\$6,362	\$189
Total Budget Authority	\$8,277	\$6,173	\$6,362	\$189
Total Workyears	18.2	18.4	18.4	0.0

Program Project Description:

The Children's Health Program coordinates and advances the protection of children's environmental health across the EPA by assisting with developing regulations, improving risk assessment and science policy, implementing community-level outreach and education programs, and tracking indicators of progress on children's health. The Children's Health Program is directed by the *Policy on Evaluating Health Risks to Children*, ²⁷⁴ Executive Order (EO) 13045 *Protection of Children's Health from Environmental Health Risks and Safety Risks*, ²⁷⁵ statutory authorities addressing children's environmental health, and other existing guidance. ²⁷⁶

In FY 2021, the Children's Health Program supported Pediatric Environmental Health Specialty Units by providing supplemental programming on children's health in Environmental Justice (EJ) communities, particularly during the COVID pandemic;²⁷⁷ awarded two grants to provide technical assistance to support the improvement of school facilities²⁷⁸ and announced a new grant opportunity²⁷⁹ for up to 10 awardees to support healthy school environments with an emphasis on underserved communities; hosted a workshop for public health officials on children's health and wildfire smoke; partnered with Scholastic to host a challenge that reached over 68 percent of middle school teachers and 117,000 student participants regarding stormwater and children's health protection; conducted two plenary meetings of the Children's Health Protection Advisory Committee (CHPAC)²⁸⁰ to receive advice on heathy school environments and TSCA, and launched a new charge regarding the Consideration of Legally Working Children in Pesticide Exposure Assessments; developed a video to provide basic children's environmental health information; and conducted events and outreach to stakeholders to reinvigorate EPA's presence and voice, among other initiatives.

²⁷⁴ For more information, please see: https://www.epa.gov/children/epas-policy-childrens-health.

²⁷⁵ For more information, please see: https://www.govinfo.gov/content/pkg/FR-1997-04-23/pdf/97-10695.pdf.

²⁷⁶ For more information, please see: https://www.epa.gov/children/rules-and-regulations-impact-childrens-health.

²⁷⁷ For more information, please see: https://www.pehsu.net/.

²⁷⁸ For more information, please see: https://www.epa.gov/newsreleases/epa-announces-selection-organizations-receive-funding-healthy-learning-environments.

²⁷⁹ For more information, please see: https://www.epa.gov/newsreleases/epa-announces-request-applications-childrens-healthy-learning-environments-low-income.

²⁸⁰ For more information, please see: https://www.epa.gov/children/childrens-health-protection-advisory-committee-chpac.

The Children's Health Program has a successful track record of collaboration with non-governmental organizations, state, local and tribal governments, and other federal agencies. To further protection of children in EJ communities, and those affected by climate change, the Program led the steering committee of the President's Task Force on Environmental Health Risks and Safety Risks to Children to prepare for a meeting of cabinet-level principals which was held in early FY 2022 to establish a new subcommittee to focus on children's environmental health, climate change and disasters, and to rejuvenate subcommittees on lead and asthma disparities. Within EPA, the Office of Children's Health Protection (OCHP) collaborates closely with EPA's national program managers and regional offices, as well as EPA's Office of Environmental Justice, to develop effective tools and messages in support of children in underserved communities who disproportionately suffer from adverse environmental exposures, and to advance information and messaging to address health risks to children from climate change.

In FY 2021, the Children's Health Program contributed to the development of approximately 100 regulations, scientific assessments and/or policies, including actions under the Toxic Substances Control Act, Safe Drinking Water Act, Food Quality Protection Act, and Clean Air Act, among others. The Program finalized an update to EPA's 2021 Policy on Children's Health²⁸¹ that considers scientific advances from the past 25 years and broadens scope to encompass the full breadth of activities performed by EPA in support of children, including EJ and climate change; and began formulation of metrics to report on progress. OCHP contributed to the Interagency Policy Councils on Child and Maternal Health to assist their development to all-of-government approaches for protecting children's health in schools and improving maternal health outcomes. OCHP partnered with the Department of Health and Human Services to support the Lead Exposure and Prevention Advisory Committee. OCHP reached stakeholders through nearly 135,000 web impressions, and instituted approaches to better coordinate headquarters and regional children's environmental health activities.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

Children's environmental health refers to the effect of the environment on children's growth, wellness, development, and risk of disease. EPA strives for all parts of the Agency to apply and promote the use of the best available science, policy, partnerships, communications, and action to protect children from adverse health effects resulting from harmful environmental exposures. In FY 2023, EPA will continue to protect children in underserved communities who suffer disproportionately from the effects of exposures enhanced by socio-economic determinants of health, and to address children's exposures which are exacerbated by climate change. EPA actions will be informed by two important considerations; first, the scientific understanding of childhood as a sequence of life stages, from conception through infancy and adolescence to early adulthood (age 21); and second, the recognition that protecting children's health is necessary to protect human health, because every adult was once a child.

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²⁸¹ For additional information, please see: https://www.epa.gov/system/files/documents/2021-10/2021-policy-on-childrens-health.pdf.

In FY 2023, the Children's Health Program will focus on implementing the 2021 Policy on Children's Health to ensure that EPA consistently and explicitly considers early life exposures and lifelong health in all human health decisions. The Program will convene the steering committee of President's Task Force on Environmental Health Risks and Safety Risks to Children to report on progress in the areas of climate change and disasters, childhood lead; asthma disparities; and climate, emergencies and disasters, among other topics. The Program will continue to build on partnerships with key stakeholders and leverage resources and work for durable, nationally relevant improvements in children's health protection.

In FY 2023, the Program will evaluate and identify follow-up actions to an expected FY 2022 state-of-the-science report by the National Academies of Science, Engineering, and Medicine on the latest scientific advancements on children's environmental health. The Program also will host a variety of activities to mark Children's Health Month in October to educate parents, caregivers, teachers, and others on how to better protect children from adverse environmental exposure. The Program will coordinate two meetings of the Children's Health Protection Advisory Committee, with delivery of expert responses to additional charge questions related to high priority children's environmental health issues.

Performance Measure Targets:

(PM CH01) Percentage of completed EPA actions that concern human	FY 2022	FY 2023
health that include assessment and consideration of environmental health	Target	Target
information and data for children at all life stages.	50	70
(PM CH02) Number of EPA regional offices with stakeholder engagement	FY 2022	FY 2023
on children's environmental health designed to provide durable, replicable,	Target	Target
and widespread results.	3	5

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$129.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$60.0) This program change is an increase to provide additional support for existing programs and workforce in the Children's Health Program. This includes updating and expanding indicators and trends in America's Children and the Environment by gathering evidence to better represent impacts of environmental exposures on children in underserved communities and by making improvements in the accessibility and presentation of the underlying data.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Toxic Substances Control Act (TSCA); Safe Drinking Water Act (SDWA); Comprehensive Environmental Response, Compensation, and

Liability Act (CERCLA); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); and Food Quality Protection Act (FQPA).

Environmental Education

Program Area: Information Exchange / Outreach Goal: Take Decisive Action to Advance Environmental Justice and Civil Rights Objective(s): Promote Environmental Justice and Civil Rights at the Federal, Tribal, State and Local Levels

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$3,311	\$8,580	\$8,668	\$88
Total Budget Authority	\$3,311	\$8,580	\$8,668	\$88
Total Workyears	10.1	9.2	9.2	0.0

Program Project Description:

In 1990, the National Environmental Education Act (NEEA) was established with the objective of improving the public's understanding and knowledge of the natural and built environment, enabling people to effectively solve environmental problems. NEEA states that "there is growing evidence of international environmental problems, such as global warming...that pose serious threats to human health and the environment." The Office of Environmental Education (OEE) has been tasked with implementing environmental education (EE) programming that helps EPA address these issues from the local community to national and international levels with a focus on frontline communities that are pollution-burdened and as well as underserved communities.

EPA's OEE staff manage the National Environmental Education Act Federal Advisory Committee. Congress established the Agency's NEEAC under the NEEA, to advise the Administrator on a wide range of environmental education matters.

The Program provides management and technical support to these advisory committees. The Committee provides EPA's Administrator with independent advice on environmental issues, addresses environmental issues, like climate change, that impact frontline and underserved communities, through education, a commitment to equity, and stakeholder grants authorized by the NEEA. OEE also supports the Agency's environmental and public health protection goals by empowering communities with expanded access to quality environmental and climate education, providing educational materials for teachers, hosting educational events and, engaging stakeholders through the National Environmental Education and Training Program (teacher training program), the Presidential Environmental Youth Award (PEYA) Program, and the Presidential Innovation Award for Environmental Educators (PIAEE) Program. These programs promote civic action to reduce the impacts of climate change and promote environmental and climate equity through an educational lens.

In FY 2021, OEE recognized 15 educators and 32 students for their leadership and commitment to environmental education and environmental stewardship. In FY 2021, five educators received

²⁸² For more information, please see: https://www.epa.gov/sites/production/files/documents/neea.pdf.

the 2021 PIAEE, and 10 educators were recognized with an honorable mention distinction. Winning educators demonstrated leadership by integrating environmental education into multiple subjects and using topics such as climate change, a healthy school environment, environmentally friendly agriculture practices, human contributions to ocean litter, Science, Technology, Engineering, and Mathematics education, and recycling or school gardens.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Promote Environmental Justice and Civil Rights at the Federal, Tribal, State, and Local Levels in the *FY 2022 - 2026 EPA Strategic Plan*.

OEE will implement the teacher training program and regional grant program with a focus on fighting climate change and protecting public health through EE and improved engagement with frontline communities that are pollution-burdened as well as underserved communities.

In FY 2023, OEE will:

- Support career development through education by funding innovative EE grant projects in frontline communities that can lead to inclusive, just, and pollution-free communities and an economy that supports high-quality jobs.
- Create an OEE's grant website tool for the public that provides detailed and valuable information on all OEE regional grants, including information on audience, project format and duration, environmental topic, and the environmental and educational impacts achieved.
- Ensure formal and non-formal educators have the knowledge and teaching skills necessary to help advance environmental and climate literacy in America through the National Environmental Education and Training Program.
- Build strategic partnerships that include underserved and overburdened communities to increase the conversation around using EE as a tool to achieve environmental protection goals while achieving environmental justice (EJ), climate equity, and economic prosperity.
- Ask the National Environmental Education Advisory Council (NEEAC) to provide a set of national recommendations on how frontline and underserved communities can use EE to build capacity to become resilient to the effects of climate change.
- Create public and private partnerships through the National Environmental Education Foundation (NEEF) to develop programs and initiatives that can empower frontline communities to address environmental threats, advance equity, and increase economic prosperity for all.

- Create a whole of federal government approach to environmental and climate education
 that promotes environmental stewardship and prioritizes equity, inclusion, EJ, and an
 improved economy. For example, collaborate with the Department of Education to enlist
 colleges and universities focusing on Minority Serving Institutions to assist underserved
 communities through student internships, practicums, and capstone projects.
- Utilize an information management system that will track outputs and outcomes for each grant to ensure program effectiveness, improve program efficiency, and improve OEE's overall customer service. The information tracking system also will be used for the PEYA and PIAEE Programs.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$72.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$16.0) This program change is an increase to support building public awareness and knowledge through environmental education on issues such as climate change and environmental justice.

Statutory Authority:

National Environmental Education Act (NEEA); Clean Air Act (CAA), § 103; Clean Water Act (CWA), § 104; Solid Waste Disposal Act (SWDA), § 8001; Safe Drinking Water Act (SDWA), § 1442; Toxic Substances Control Act (TSCA), § 10; Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), § 20, and the Federal Advisory Committee Act (FACA).

Program Area: Information Exchange / Outreach Cross-Agency Mission and Science Support

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	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$13,713	\$14,084	\$14,413	\$329
Hazardous Substance Superfund	\$1,511	\$1,328	\$1,328	\$0
Total Budget Authority	\$15,224	\$15,412	\$15,741	\$329
Total Workyears	28.8	30.2	30.2	0.0

Program Project Description:

EPA's Environmental Information Exchange Network (EN) is a standards-based, secure approach for EPA and its state, tribal, and territorial partners to exchange and share environmental data over the internet. Capitalizing on advanced technology, data standards, open-source software, shared services for EPA's Digital Strategy, and reusable tools and applications, the EN offers its partners tremendous capabilities for managing and analyzing environmental data more effectively and efficiently, leading to improved decision-making.

The Central Data Exchange (CDX)²⁸³ is the largest component of the EN Program and serves as the point of entry on the EN for environmental data transactions with the Agency. CDX provides a set of core shared services that promote a leaner and more cost-effective service framework for the Agency by avoiding the creation of duplicative applications. It enables faster and more efficient transactions for internal and external EPA clients, resulting in reduced burden.

Working in concert with CDX is EPA's System of Registries, which is a system of shared data services designed to enhance efficiency, reduce burden on the regulated community, and improve environmental outcomes, including environmental justice. EPA and EN partners routinely reference these shared data registries, from commonly regulated facilities and substances to the current list of federally recognized tribes. They identify the standard or official names for these assets, which, when integrated into EPA and partner applications, foster data consistency and data quality as well as enable data integration.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA will continue to support core functions for the EN information technology (IT) systems. The EN Program will continue to be a pivotal component of EPA's Digital Strategy that

²⁸³ For more information on the Central Data Exchange, please see: https://cdx.epa.gov/.

supports business process change agencywide. Under this strategy and the 21st Century Integrated Digital Experience Act, ²⁸⁴ the Agency is streamlining business processes and systems to reduce reporting burden on states and regulated facilities and to improve the effectiveness and efficiency of environmental programs for EPA, states, and tribes. EPA also is responsible for managing EN technical governance groups and administering the pre- and post-award phases of the EN grants to states, tribes, and territories. These efforts support a standards-based, secure approach for EPA and its state, tribal, and territorial partners to efficiently exchange and share environmental data electronically. The Agency also administers and implements the Cross-Media Electronic Reporting Regulation (CROMERR) that removes regulatory obstacles for e-reporting to EPA programs under Title 40 of the Code of Federal Regulations (CFR).

EPA aims to reduce burden and avoid costs while improving IT. The Agency provisioned Virtual Exchange Services (VES), or virtual nodes, to facilitate data transactions supporting states and tribal partners. EPA will continue to carry out the baseline support for the adoption and onboarding of VES and associated services for EPA and its partners. This includes providing a technology framework – shared CROMERR services – which reduces the burden on programs and external reporters by providing CROMERR compliant solutions. For example, the shared electronic identity proofing and signature services for CROMERR supports 31 partner regulatory reporting programs to date. EPA estimates that partners adopting shared CROMERR services save \$120 thousand in development and at least \$30 thousand in operations each year, which results in a cost avoidance of greater than \$2.5 million for EN partners.

In FY 2023, EPA will continue to improve the functionality and use of the System of Registries. ²⁸⁵ In addition to streamlining the Registries, EPA will launch a broader effort across the enterprise to engage organizations and facilitate the adoption of these data services through Cloud technology and Representational State Transfer (REST or RESTful) application programming interfaces (API). Registries are shared data services in which common data are managed centrally but shared broadly. They improve data quality in EPA systems, enable integration and interoperability of data across program silos, and facilitate discovery of EPA information. An example of the Agency's effort to promote the adoption of data services is the integration of the tribal identification services (TRIBES) across EPA systems.

In FY 2023, EPA will continue implementing a solution related to shared facility identification information. Centralized facility management also is fundamental to better environmental management by bringing together EPA data across programmatic silos. Like facility data, substance information also is regulated across EPA programs, with many EPA programs relying on the Substance Registry Service (SRS) to improve data quality and reduce burden.

EPA tracks the number of registry webpages, users, and web service hits as one measure of usage. For example, the SRS website is visited by approximately 60 thousand users per month; many of these users visit SRS to understand regulatory information about chemicals. SRS also receives between 20 thousand and 140 thousand web service hits per month (depending on reporting cycles), mostly by EPA systems that have incorporated the web services into their online reporting

²⁸⁵ For more information, please see: https://ofmpub.epa.gov/sor_internet/registry/sysofreg/about/about.jsp.

²⁸⁴ For more information on the 21st Century Integrated Digital Experience Act, please refer to: https://www.congress.gov/115/plaws/publ336/PLAW-115publ336.pdf.

forms. Priorities for EPA registries include improving registry technologies by moving them into an open-source platform, so they are cloud-ready.

In FY 2023, EPA will migrate TRIBES, SRS, and the Registry of EPA Applications, Models and Data Warehouses (READ) to a cloud-based open-source platform. EPA will continue to expand the number of EPA and partner systems that integrate registry services into their online reports and systems, reducing burden and improving data quality. This includes updating EPA's dataset registry to allow EPA scientists, external partners, and others to share information and make information easier to find in the cloud.

In FY 2023, EPA will continue to work with the Department of Homeland Security's Customs and Border Protection (CBP) to maintain, utilize, and improve systems to facilitate the import and export of legitimate goods and leverage big data and artificial intelligence tools to identify and prevent or stop illegal goods from entering or leaving the United States. EPA supports over 20 data exchange types within EPA and with CBP to automate and streamline over 8 million annual import and export filings. This automation is essential for managing a significantly increasing number of imports and exports (*e.g.*, due in large part to e-Commerce) and allows coordinators/officers to focus on compliance monitoring and key high-value targeting activities for non-compliant imports and exports, and to better coordinate with CBP.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$329.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. This change also includes program increases for the Exchange Network Program to support environmental data sharing among EPA, state, tribes, and territories.

Statutory Authority:

Federal Information Security Management Act (FISMA); Clean Air Act (CAA); Clean Water Act (CWA); Toxic Substances Control Act (TSCA); Federal Insecticide Fungicide and Rodenticide Act (FIFRA); Resource Conservation and Recovery Act (RCRA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA).

Executive Management and Operations

Program Area: Information Exchange / Outreach Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$48,837	\$46,836	\$63,256	\$16,420
Total Budget Authority	\$48,837	\$46,836	\$63,256	\$16,420
Total Workyears	263.6	272.1	309.1	37.0

Total workyears in FY 2023 include 6.2 FTE to support Executive Management and Operations working capital fund (WCF) services.

Program Project Description:

The Executive Management and Operations Program supports various offices that provide direct executive and logistical support to EPA's Administrator. In addition to the Administrator's Immediate Office (IO), the Program supports the Office of Congressional and Intergovernmental Relations (OCIR), Office of Administrative and Executive Services (OAES), Office of the Executive Secretariat (OEX), the Office of Public Affairs (OPA), and the Office of Public Engagement and Environmental Education (OPEEE).

The Program also supports EPA's 10 regions. The Program's management, coordination, and policy activities link the Agency's engagement with outside entities, including Congress, state and local governments, tribes, nongovernmental organizations, national and community associations, and the public.

Within the Program, key functions include responding to congressional requests for information; coordinating and providing outreach to state and local governments, tribes, and rural communities; and supporting press and other communications activities. The Program also resources mission support functions, including but not limited to administrative management services involving correspondence control and records management systems, human resources management, budget formulation and execution, outsourcing, and information technology management services.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Agency requests an additional \$16.4 million to support engagement with state and local partners, enhance training of healthcare providers in underserved communities on the prevention, diagnosis, management, and treatment of children's exposure to lead, implement and strengthen the Agency's ability to carry out effective risk communication, restore core capacity to the Executive Management and Operations Program, provide contract support for the Agency's

management operations and multi-media and risk communications, and support evidence building activities in support of the Foundations for Evidence-Based Policymaking Act of 2018.

OCIR serves as EPA's principal point of contact for Congress, regions, states, and local governments and as the coordination point for interaction with other agency offices and officials. OCIR is comprised of two main components: the Office of Congressional Affairs (OCA) and Office of Intergovernmental Relations (OIR). OCA facilitates all legislative activity and interactions with Congress. OIR manages interactions with state and local governments and serves as the liaison for the Agency with national associations for state and local officials.

In FY 2023, OCA will continue to prepare EPA officials for hearings, oversee responses to written inquiries and oversight requests from members of Congress, and coordinate and provide technical assistance and briefings on legislative areas of interest to members of Congress and their staff.

In FY 2023, OIR will continue to inform and consult with state and local governments on regulations and other EPA activities. Additionally, OIR will continue to lead the Agency's efforts to support and build partnerships with the states, local governments, and tribes on environmental priorities through regular engagements with intergovernmental associations and state and local officials, as well as through the National Environmental Performance Partnership System and the increased use of Performance Partnership Agreements and Grants with a focus on addressing climate change and ensuring underserved communities are considered throughout the process. OIR also will continue to operate its Local Government Advisory Committee and Small Communities Advisory Subcommittee, which provide critical advice to the Administrator.

In addition, OCIR will continue to regularly review and evaluate its processes for responding to congressional and intergovernmental correspondence and Freedom of Information Act (FOIA) requests; prepare for hearings or briefings; provide technical assistance; and coordinate with EPA's program offices, regional offices, states, local officials, and associations. In addition, the Agency requests an additional \$2.45 million to support EPA's implementation of the Foundations for Evidence-Based Policymaking Act of 2018. OCIR's activities supporting the Grant Commitments Met learning priority area in EPA's Learning Agenda, will include conducting reviews of select agency grant programs to learn if the commitments established and met are achieving the intended environmental results, and provide recommendations, as appropriate, to inform future grants management.

OPA facilitates the exchange of information between EPA and the public, media, Congress, and state and local governments; broadly communicates EPA's mission; assists in public awareness of environmental issues; and informs EPA employees of important issues that affect them. Annually, OPA issues nearly 1,500 press releases; responds to approximately 8,000 media inquiries; and oversees more than 150 audio-visual productions, 500 graphic productions, 2,700 event photographs, and 40 portraits. In addition, in terms of digital media, OPA receives over 160 million impressions on the internet, including www.epa.gov and EPA social media accounts, and posts nearly 100 unique EPA homepage internet news banners. Also, to facilitate communications with EPA employees nationwide, OPA annually posts over 200 intranet banners; issues 48 issues of a weekly e-newsletter - *This Week @ EPA* - with a total of 240 articles; and sends more than 100 agencywide employee Mass Mailers from EPA's Administrator, Deputy Administrator, and other

senior leaders. In FY 2023, OPA will continue to inform the media of agency initiatives and deliver timely, accurate information. The Office will continue to update the Agency's internet site to provide stakeholders with transparent, accurate, and comprehensive information on EPA's activities and policies. OPA will continue using social media, multimedia, and new media tools to provide stakeholders with information. The Office also will work with EPA's programs and regional offices to improve employee communication; external communication on relevant environmental and human health risks; collaboration and engagement with internal and external stakeholders; updates to the Agency's intranet site; and the use of other communication tools.

OPA also is responsible for ensuring that EPA carries out effective risk communication by sharing critical information on how we are addressing human health and environmental risks with the American public, communities, public officials, and other stakeholders in a way that it is tailored to their needs, reaching a wide audience, and providing meaningful actions they can take to reduce risk. This is integral to most of the work done across the Agency's offices and regions and is essential to carrying out EPA's mission of protecting human health and the environment.

Currently, we are working to ensure that risk communicators at the Agency are connected to best practices from the field, high quality training opportunities, and agencywide efforts underway to improve risk communication. Further, EPA regularly faces intractable risk communication issues that often need sustained focus by highly trained staff who can apply evidence-based practices. Addressing these issues and meeting the challenges of the future requires creating sustained culture change, building agency knowledge and a robust community of practice, and developing strong relationships with the academic community and our federal, state, and tribal partners.

In FY 2023, the Agency will continue to strengthen EPA's ability to carry out effective and consistent risk communication and position the Agency to meet the risk communication challenges of the future by:

- (1) Significantly expanding training across the Agency and with its partners, to create a community of practice and increase staff knowledge in a meaningful and sustainable way. This will increase the number of staff at the Agency and among partners who are using the same best practices in their risk communication efforts while at the same time building a network of staff located across all regions and offices who are well-positioned to share their risk communication expertise.
- (2) Launching an internal risk communication fellowship program to increase EPA's progress on the most difficult risk communication issues. The fellowship program will be open to EPA employees and will provide 10 weeks of intensive risk communication study and training followed by 10 to 13 weeks of applying the knowledge gained to an intractable risk communication problem facing the home office or region.
- (3) Developing academic partnerships to study EPA's risk communication challenges and improve the Agency's reliance on evidence-based practices. This includes increasing research partnerships to develop a research portfolio with the explicit goal of studying EPA-relevant risk communication questions, and then translating findings into usable tools, applications, and best practices for use across the Agency.

In FY 2022, the President's Task Force on Environmental Health Risks and Safety Risks met, and the Lead Subcommittee focused on the next generation all of government approach to reducing exposures to lead, asthma disparities and addressing climate change, disasters and emergencies. There is an opportunity to improve the environmental education and training of healthcare providers and medical professionals in identifying and communicating the causes and impacts of childhood lead exposure in underserved communities in an effort to prevent and reduce exposures. The Agency requests an additional \$5.49 million for these efforts. EPA will work with healthcare providers and families to address this problem directly to prevent and reduce exposure to lead. To further support the Administration's Lead Exposure Reduction Initiative, and in coordination with EPA's program and regional offices, in FY 2023, the Agency will continue to lead ongoing efforts to: 1) strengthen EPA's communications with the public on the risks of lead exposure by working with external leaders in the field to build upon the way the Agency conducts its outreach; and 2) leverage EPA's existing relationship with Pediatric Environmental Health Specialty Units (PEHSUs)²⁸⁶ to enhance and support training of healthcare providers in underserved communities to prevent and reduce children's exposure to lead.

There are several unique risk communication challenges regarding lead, but also unique assets for the Agency to deploy to reduce risk to the American public—especially to children. Lead exposure to children can result from multiple sources and can cause irreversible and life-long health effects. There is no level of lead exposure which is safe. This means that anything the Agency can do to reduce exposure and lower children's blood lead levels will lead to significant improvements in public health and brighter, more productive futures for America's children. In FY 2023, EPA will facilitate interagency coordination under the auspices of the Lead Exposures Subcommittee of the Presidential Task Force on Environmental Health Risks and Safety Risks to Children around childhood lead exposures and related effects, including research activities and sharing information with the public, to better understand and prevent disease and disability. The specific goals for FY 2023 include: recommending coordinated federal strategies to prevent lead exposure and associated effects; disseminating information to diverse audiences, including policy makers, health care providers, the general public, and other stakeholders; and coordinating and disseminating an inventory of federal actions to reduce childhood lead exposures.

Activities related to enhancing training of healthcare providers in underserved communities will include expanding ongoing PEHSU activities with an increased focus on enhancing the education provided to medical professionals on how to identify causes and impacts of childhood lead exposure; and working with health care providers and families to address this problem directly in an effort to prevent and reduce exposure to lead.

As the central mission support administrative management component of the Administrator's Office (AO), the OAES provides advice, tools, and assistance to the AO's programmatic operations across 11 offices. In FY 2023, OAES will continue to conduct the following mission support functions: human resources management, budget and financial management, information

²⁸⁶ Pediatric Environmental Health Specialty Units (https://www.pehsu.net/) provide expert information, training and consultation for health care professionals and the public on evidence-based prevention, diagnosis, management, and treatment of children's environmental health conditions. The PEHSU Program increases the ability of the general public to take simple steps to reduce harmful exposures by raising awareness among parents, school officials and community leaders.

technology and security, outsourcing, facilities management, and Government Accountability Office/Office of the Inspector General audit management.

In FY 2023, OEX will continue to provide critical administrative support to the Administrator, Deputy Administrator, Chief of Staff, senior agency officials, and staff to comply with the statutory and regulatory requirements under the Federal Records Act, FOIA, Plain Writing Act, and related statutes and regulations. OEX will continue to manage the AO's correspondence management, records management, Privacy Act implementation, and FOIA response activities. In FY 2022, the Office deployed a new enterprise correspondence tracking and workflow management application that is used by all EPA programs, regions, and labs. The application replaced the legacy Correspondence Management System, which provided paperless workflow, tracking and records management capabilities to agency staff since FY 2004. The new application seamlessly integrates with current information technology platforms, including Microsoft Outlook and Office, and will offer increased functionality and ease of use.

OEX also will revise EPA's Correspondence Manual (Publication 1322) to reflect current best practices, update stylistic and grammatical policies, and improve communications using plain language and gender inclusivity. The effort will include consultations with EPA's programs and regions as well as close coordination with the Office of Public Affairs.

Other OEX responsibilities include processing correspondence for the Administrator and Deputy Administrator; reviewing and preparing documents for their signature; managing the Administrator's primary email account; serving as custodian of the Administrator's, Deputy Administrator's, and IO senior officials' records; overseeing the records management program for all AO staff offices; and reviewing and issuing ethics determinations for gifts received by the Administrator and Deputy Administrator. OEX also manages the privacy program for the AO and monitors, reviews, and audits AO systems of records. Finally, OEX manages FOIA-related operations for the AO and responds to all requests for records held by any of the AO's five associate administrator offices, six staff offices, and the Immediate Office of the Administrator. OEX closed 414 FOIA requests in FY 2021 and has succeeded in reducing its backlog of open requests from 730 at the beginning of the fiscal year to 668. The pace of incoming requests remained high during the Presidential transition, with nearly 300 new requests, many of which are complex and seek significant volumes of records.

In FY 2023, OPEEE will continue providing advice to the Administrator and senior staff on activities surrounding different stakeholder groups, including generating and distributing outreach plans for most regulatory actions. Such plans often include meeting regularly with stakeholder groups to communicate the Administration's agenda at EPA; providing advance notification communications to relevant stakeholder groups on upcoming regulatory actions; facilitating instate visits by the Administrator and/or senior staff to collect regulatory feedback; communicating key dates to stakeholders pertaining to opportunities to comment on EPA rulemakings; and organizing conference calls on regulatory topics with impacted stakeholders.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$3,071.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$5,490.0 / +20.0 FTE) This program change is an increase to support engagement with state and local partners, enhanced training of healthcare providers in underserved communities on the prevention, diagnosis, management, and treatment of children's exposure to lead, and increased funding to implement and strengthen the Agency's ability to carry out effective risk communication. This investment includes \$3.6 million in payroll.
- (+\$5,409.0 / +9.0 FTE) This program change is an increase to restore core capacity to the Executive Management and Operations Program and provide contract support for the Agency's management operations and multi-media and risk communications. This investment includes \$1.6 million in payroll.
- (+\$2,450.0 / +8.0 FTE) This program change is an increase to support evidence building activities in support of the Foundations for Evidence-Based Policymaking Act of 2018. This investment includes \$1.4 million in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Environmental Research, Development, and Demonstration Authorization Act (ERDDAA).

Small Business Ombudsman

Program Area: Information Exchange / Outreach Cross-Agency Mission and Science Support

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	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$1,250	\$1,778	\$2,183	\$405
Total Budget Authority	\$1,250	\$1,778	\$2,183	\$405
Total Workyears	3.3	4.6	5.6	1.0

Program Project Description:

The Small Business Ombudsman Program includes the Asbestos and Small Business Ombudsman (ASBO),²⁸⁷ housed within the Office of Small and Disadvantaged Business Utilization (OSDBU). It also includes the Small Business Advocacy Chair and other small business activities located in the Office of Policy's Office of Regulatory Policy and Management.²⁸⁸ The Program provides a comprehensive suite of resources, networks, engagement opportunities for training and advocacy on behalf of small businesses, and leads EPA's implementation of the Regulatory Flexibility Act, as amended by the Small Business Regulatory Enforcement Fairness Act.

The ASBO Program operates through two roles: EPA's Asbestos Ombudsman and EPA's Small Business Ombudsman. The Asbestos Ombudsman role services a toll-free hotline, functioning as an informational liaison and guide in responding to asbestos-related questions and concerns. The Small Business Ombudsman role provides informal guidance and support in regulatory compliance assistance for small business in the rulemaking process. The ASBO Program advocates and partners with a variety of internal and external stakeholders, including EPA programs and regional offices, State Small Business Environmental Assistance Programs (SBEAPs),²⁸⁹ the U.S. Small Business Administration's Office of Advocacy, and Office of the National Ombudsman, as well as numerous local and national small business trade associations. ASBO's partnerships help advocate for the small business perspective, serving as a conduit of information, and offering a distinct perspective to help achieve better regulatory compliance and improved environmental outcomes.

Overall, the core functions of the ASBO include: providing access to information, training and resources that may assist small businesses in complying with EPA regulations; assisting EPA's program offices with analysis and consideration of their regulatory impacts on small businesses; supporting small entity engagement activities in evaluating upcoming environmental rules; ensuring oversight of EPA's asbestos and small business assistance programs; and serving as an informational liaison to the public and small business by operating the ASBO hotline. Based on

²⁸⁷ For more information, please see: <a href="https://www.epa.gov/resources-small-businesses/asbestos-small-businesses/

²⁸⁸ For more information, please see: https://www.epa.gov/aboutepa/about-office-policy-op#ORPM.

²⁸⁹ For more information, please see: https://nationalsbeap.org/.

the Agency's overall small business regulatory and environmental compliance assistance efforts, EPA has earned a grade of "A" in the last 15 Small Business Administration (SBA) Office of the National Ombudsman Annual Reports to Congress.²⁹⁰

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

Consistent with EPA's priorities for addressing climate change, equity, and Environmental Justice (EJ) in FY 2023, the ASBO will:

- Finalize and launch a new strategy to better leverage the ASBO's statutory monitoring and reporting responsibilities to achieve mission outcomes. Under the 1986 Asbestos Hazard Emergency Response Act (AHERA) (15 U.S.C. §2641-2656) and the 1990 Clean Air Act (CAA) Amendments, Small Business Stationary Source Technical and Environmental Compliance Assistance Program (42 U.S.C. §7661f), the ASBO is required to monitor and report on the effectiveness of EPA's asbestos and small business compliance assistance programs. The ASBO's monitoring and reporting strategy will provide an efficient and effective process for collecting and analyzing program performance, as well as assist in developing findings and value-added recommendations to ensure program effectiveness. The new strategy's more agile and program centric monitoring and reporting approach will help expand public access to asbestos-related information, strengthen collaboration with state SBEAP providers, and enhance support to small entities to improve their environmental performance and compliance.
- Enhance the engagement of SBEAP stakeholders in EPA's EJ efforts. The National SBEAPs recently developed an Environmental Justice Subcommittee that is aimed at supporting the implementation of *Executive Order (EO) 14008 Tackling the Climate Crisis at Home and Abroad.*²⁹¹ In FY 2023, the ASBO will support the EJ Subcommittee's efforts through the ASBO's five-year cooperative agreement, providing expanded training, technical assistance, and other EJ related activities to fully engage with small businesses located or operating within EJ communities. Through the cooperative agreement, the ASBO also will continue enhancing the newly updated www.nationalsbeap.org website, including expanding the dedicated foreign language page for non-English speaking small businesses to access environmental assistance resources.
- Continue to strengthen access to environmental compliance assistance resources and stakeholder collaboration through direct hotline assistance and small business outreach or engagement activities designed to assist overburdened and marginalized small business stakeholders. The Program will continue to support EPA program and regional office communication with small businesses by developing compliance assistance best practice tools and resources tailored to the unique needs of small businesses. Resources will include

²⁹⁰ For more information, please see: https://www.sba.gov/sites/default/files/2021-01/SBA Annual Report 2019-508.pdf

²⁹¹ For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/

templates for compliance assistance guides, fact sheets, FAQs, webinar and training announcements, and other targeted small business communication tools. Additionally, the ASBO will procure subscription services that will improve and expand its monthly newsletter distribution and communication to the small business community.

- Foster stronger partnerships with ASBO stakeholders, including state compliance assistance programs, small business trade associations, and other EPA regional offices to increase collaboration with underserved communities. To best support this engagement in accordance with EO 13985,²⁹² the ASBO will offer EPA rule writers professional coordination and facilitated engagement support services to allow for early listening and collaboration for specialized consideration and attention to the interests of small and disadvantaged businesses.
- Enhance underserved community engagement through the ASBO's newly expanded cooperative agreement for the National Small Business Environmental Assistance Program, which facilitates state and national collaboration on small businesses environmental assistance services. This ASBO-funded cooperative agreement will support the expansion of the National SBEAP website²⁹³ and other collaboration tools, including a new compliance assistance web-resource, dedicated to non-English speaking small businesses to ensure that environmental assistance resources are available and understood by those traditionally underserved. Additionally, the cooperative agreement will allow for financial support in hosting and managing compliance assistance training events to better collaborate with the states.
- Implement a new ombudsman monitoring and reporting process to comply with both the Asbestos Ombudsman's and Small Business Ombudsman's statutory requirements. A new, less burdensome, and more agile data collection mechanism will be deployed to help monitor and periodically report on the effectiveness of the asbestos hotline services and the small business environmental assistance programs under the 1990 CAA Amendments.
- Convene multiple Small Business Advocacy Review Panels to inform the development of EPA rules, particularly those undertaken pursuant to the revised Toxic Substances Control Act (TSCA). Revised TSCA requirements have resulted in a considerable increase in the number of Small Business Advocacy Review Panels being initiated by the Agency.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

 $[\]frac{292}{\text{For more information, please see: } \underline{\text{https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/}}$

²⁹³ For more information, please see: www.nationalsbeap.org.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$38.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$367.0 / +1.0 FTE) This program increase will support core operations in EPA's Small Business Ombudsman Program. This investment includes \$193.0 thousand in payroll.

Statutory Authority:

Asbestos Hazard Emergency Response Act (AHERA), 1986 (adding Title II to the Toxic Substances Control Act (TSCA)) (15 U.S.C. §2641-2656); Clean Air Act, Title 5, Section 507; Small Business Stationary Source Technical and Environmental Compliance Assistance Program (42 U.S.C. §7661f); Small Business Regulatory Enforcement Fairness Act of 1996, Pub. L. 104-121, as amended by Pub. L. 110-28; Small Business Paperwork Relief Act, 44 U.S.C. 35; 42 U.S.C. § 7661f; and 15 U.S.C. §§ 2641-2656.

Small Minority Business Assistance

Program Area: Information Exchange / Outreach Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$1,756	\$1,680	\$1,935	\$255
Total Budget Authority	\$1,756	\$1,680	\$1,935	\$255
Total Workyears	8.5	7.6	7.6	0.0

Program Project Description:

EPA's Office of Small and Disadvantaged Business Utilization (OSDBU) manages the Agency's Small Business Contracting Program mandated under Section 15(k) of the Small Business Act, 15 U.S.C. § 644(k). As prescribed under that section, the Program provides expertise in ensuring small business prime and subcontracting opportunities to help promote procurement equity and expand EPA's competitive supplier base in carrying out the Agency's mission. Under the Program, OSDBU provides EPA's contracting community statutorily required counseling and training on all aspects of governing small business requirements throughout the federal acquisition cycle. It also engages in statutorily mandated advocacy on behalf of the various categories of small businesses, including disadvantaged businesses; small businesses located in Historically Underutilized Business Zones (HUBZones); service-disabled veteran-owned small businesses (SDVOSBs); and women-owned small businesses (WOSBs). In accordance with Section 15(k), OSDBU further hosts or participates in an average of one small business outreach and training conference each month, providing needed technical assistance to hundreds of small and disadvantaged businesses across the country.

In implementing the statutory responsibilities required under Section 15(k), OSDBU reviews acquisition strategies to maximize small business prime and subcontracting opportunities; provides expertise in conducting market research for EPA acquisitions; performs contract bundling reviews to avoid unnecessary or unjustified limitations on small business utilization; reviews purchase card transactions within the statutory threshold; and evaluates large prime contractor subcontracting plans. In addition, OSDBU assists in the coordination of unsolicited proposals for agency acquisitions and in the resolution of small business payment issues under EPA acquisitions. It further provides a broad range of training, outreach, and technical assistance to new and prospective small business contract awardees. Historically, data reported in the Federal Procurement Data Systems (FPDS) indicates that the EPA awards an average of 40 percent of total acquisition dollars to small businesses annually – far exceeding the government-wide goal of 23 percent. Based on the Agency's record of excellence in affording small business contracting opportunities, the EPA is one of a handful of federal agencies that has earned an "A" on the last 12 Small Business Procurement Scorecards administered by the U.S. Small Business Administration (SBA).

²⁹⁴ For more information, please see: https://www.sba.gov/sites/default/files/2021-07/EPA-508.pdf.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

Consistent with EPA's priorities to advance Environmental Justice (EJ) and support to underserved communities, and to expand the country's domestic markets and capabilities, in FY 2023, the Program will:

- Develop a more targeted and data-driven outreach strategy to diversify the Agency's supplier base and optimize opportunities for socially and economically disadvantaged businesses. In FY 2023, OSDBU will build on its successful deployment of a new electronic vendor profile database to serve as a central repository of small businesses registered as ready, willing, and able to do business with EPA. OSDBU will continue efforts to expand the number of qualified small business vendors registered in the database. It will further customize the database and develop processes, procedures, and training for its utilization across EPA. The database will be used as a tool to match available socioeconomic sources and solutions with EPA procurement opportunities and outreach activities. This will include procedures for efficient and effective electronic dissemination of procurement and outreach information and a searchable functionality by EPA common spend categories. Additionally, OSDBU will develop a user guide and market the database to the boarder federal contractor community to facilitate their identification of small and disadvantaged businesses for potential teaming and formal Mentor Protégé arrangements to perform EPA contract requirements. This will help the Agency and the contractor community maintain and connect with a diverse and robust small business vendor base capable of meeting the Agency's mission needs. It also will leverage technology to simplify market research and acquisition planning, thereby reducing the procurement action lead time.
- Partner with program offices to develop strategies for enhancing socioeconomic small business utilization in targeted categories of acquisitions through a combination of specifically tailored market research and leveraging of EPA technology solutions, such as the Cleanups in My Community (CIMC) Map and EJ Screening Tool. This will enable EPA to better leverage acquisition as a catalyst for advancing equity and economic development in marginalized communities.
- Expand EPA online acquisition resources and tools to provide technical assistance and support to small and disadvantaged businesses. EPA's procurement equity assessment and related industry listening sessions conducted in connection with Executive Order (EO) 13985, ²⁹⁵ and the subsequent Biden-Harris Administration Fact Sheet ²⁹⁶ issued on June 1, 2021, confirmed that small and disadvantaged businesses face unique challenges in navigating the federal acquisition landscape and accessing information on procurement

²⁹⁵ For more information please see: https://www.federalregister.gov/documents/2021/01/25/2021-01753/advancing-racialequity-and-support-for-underserved-communities-through-the-federal-government.

296 For more information please see: <a href="https://www.whitehouse.gov/briefing-room/statements-releases/2021/06/01/fact-sheet-biden-room/statements-releases/2021

harris-administration-announces-new-actions-to-build-black-wealth-and-narrow-the-racial-wealth-gap/.

opportunities. To address those inequities, in FY 2023, OSDBU will enhance its public-facing website to provide value-added resources and tools to assist small businesses in doing business with EPA. The resources will consist of a range of technical assistance tools that will meet small and disadvantaged businesses where they are. Collectively, they will provide maximum flexibility for underserved communities and business owners to easily access and navigate the information at any time, and will include video training and messaging, guides, fact sheets, information on procurement opportunities, and relevant links that extend OSDBU's social media footprint. This will assist in leveling the playing field by connecting new and emerging federal contractors with information they need to improve their understanding of the federal marketplace and their competitiveness to win awards.

- Revamp the mechanism for requesting and conducting the required OSDBU review of EPA acquisitions above the Simplified Acquisition Threshold of \$250,000. In accordance with 15 U.S.C. § 644(k), this review is critical to verify that agency acquisitions are not unduly restrictive and that they provide the maximum practicable opportunity for small business participation. EPA conducted a procurement equity assessment following EO 13985 and identified the complexity of the federal acquisition process as a barrier to increasing small business utilization in federal acquisitions. In FY 2021, OSDBU instituted a new quarterly eLearning Power Hour to provide targeted training and education to the EPA acquisition community. In an effort to simplify the application of governing small business contracting requirements in structuring procurements, in FY 2023, OSDBU will launch a new fillable electronic form to guide and document the consideration of small business solutions in structuring EPA acquisitions. The new form will incorporate a streamlined decision tree, with guided logic to ensure contracting and program official compliance with governing requirements. It also will simplify OSDBU's review to ensure the maximum practicable small business opportunities in accordance with applicable law and Administration priorities.
- expand EPA outreach activities to promote mentoring and teaming opportunities for new and less experienced small business contractors. Many small businesses have long complained that their lack of an extensive past performance record as a federal prime contractor effectively forecloses their ability to successfully compete for federal prime contracts. In FY 2023, OSDBU will develop and conduct targeted outreach activities to connect small business vendors with more seasoned contractors to enhance their experience, capabilities, and past performance record. The outreach will help build a diverse pipeline of small and disadvantaged business contractors by facilitating opportunities for teaming relationships through joint ventures, subcontracts, and the SBA All Small Mentor Protégé Program.

Performance Measure Targets:

(PM SB1) Percentage of EPA contract spending awarded to HUBZone	FY 2022	FY 2023
businesses.	Target	Target
	3	3.2

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$199.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$56.0) This program change increases resources to help promote procurement equity through the Agency's Small Business Contracting Program.

Statutory Authority:

15 U.S.C § 644(k).

State and Local Prevention and Preparedness

Program Area: Information Exchange / Outreach Goal: Safeguard and Revitalize Communities Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$13,402	\$13,736	\$22,908	\$9,172
Total Budget Authority	\$13,402	\$13,736	\$22,908	\$9,172
Total Workyears	60.7	63.1	93.1	30.0

Program Project Description:

The State and Local Prevention and Preparedness Program establishes a structure composed of federal, state, local, and tribal partners who work together with industry to protect emergency responders, local communities, facility workers, the environment, and property from chemical accident risks through accident prevention and emergency response programs, community and facility engagement, and improved safety systems. This framework provides the foundation for community and facility chemical hazard response planning, and reduction of risk posed by chemical facilities.

Under Section 112(r) of the 1990 Clean Air Act (CAA) Amendments, chemical facilities that store more than a threshold quantity of listed extremely hazardous substances are required to implement a Risk Management Plan (RMP) program. These facilities, known as RMP facilities, take preventive measures, report data, mitigate and/or respond to chemical releases, and work with communities, response, and planning groups to increase understanding of risks.²⁹⁷

The Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 was enacted to help communities plan for chemical emergencies and to inform the public about chemicals in their community. Under EPCRA, facilities are required to report about the chemicals they produce, use, and store to state and local governments. States, tribes, and local governments use this information to prepare communities for potential chemical releases from these facilities through the development of local emergency response plans.²⁹⁸

Under Section 311(j)(5) of the Clean Water Act (CWA), EPA is required to issue regulations requiring certain facilities to develop plans to respond to worst case discharges of hazardous substances that could threaten navigable waters.

²⁹⁷ For additional information, please refer to: https://www.epa.gov/rmp.

²⁹⁸ For additional information, please refer to: https://www.epa.gov/epcra.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the State and Local Prevention and Preparedness Program will perform the following activities:

- Support inspection of RMP and EPCRA facilities to ensure compliance with accident prevention and preparedness regulations and work with chemical facilities to reduce chemical risks and improve safety. There are approximately 12,000 chemical facilities that are subject to the RMP regulations. Of these, approximately 1,800 facilities have been designated as high-risk based upon their accident history, quantity of on-site dangerous chemicals stored, and proximity to large residential populations. EPA prioritizes inspections at high-risk facilities. Using the additional funding and FTE provided for FY 2023, the Program will conduct an additional 150-200 inspections and provide compliance assistance at RMP and EPCRA-regulated facilities, checking measures to prevent chemical accidents. EPA will focus on high-risk facilities located in communities with environmental justice concerns and communities with increased climate-related risks (e.g., extreme weather, flooding, wildfires, etc.).
- Protect fenceline communities through regulatory updates and increased outreach, compliance assistance, and inspections at regulated facilities, thereby reducing risks to human health and the environment by decreasing the likelihood and impacts of chemical accidents. EPA requests \$8.2 million and 30.0 FTE to support these efforts in this program.
- Provide basic and advanced RMP and EPCRA inspector training for federal and state inspectors.
- Maintain and upgrade the RMP national database, which is the Nation's premier source of information on chemical process risks and contains hazard information on all RMP facilities. Industry electronically submits updated RMPs to this secure database. Using additional funding requested in FY 2023, EPA will initiate improvements to the RMP national database to accommodate new risk management plan submission elements resulting from ongoing regulatory changes and provide increased public access to non-sensitive portions of the RMP database and resulting analytics.
- Develop updates to the Computer-Aided Management of Emergency Operations (CAMEO) software suite (*i.e.*, the CAMEO Chemicals, CAMEO*fm*, Areal Locations of Hazardous Atmospheres and Mapping Application for Response, Planning, and Local Operational Tasks applications), which provides free and publicly available information for firefighting, first aid, emergency planning, and spill response activities.

²⁹⁹ Located in the EPA RMP database.

- In accordance with the direction in Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis*, 300 continue the Agency's review of the final RMP Reconsideration rule (84 FR 69834) and publish proposed and final rules to rescind or revise the action and address Administration priorities on environmental justice and climate change.
- Under Section 311(j)(5) of the CWA, EPA will develop regulations requiring certain facilities to develop plans for responding to a worst-case discharge, or to a substantial threat of such a discharge, of CWA-listed hazardous substances.
- Conduct outreach to regulated industry concerning changes or updates to RMP and EPCRA regulations and interpretive guidance.

Performance Measure Targets:

Work under this program directly supports performance results in the Superfund: EPA Emergency Preparedness program under the Superfund appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$464.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$8,208.0 / +30.0 FTE) This program change is an increase to support a multi-pronged approach to protect fenceline communities at risk from nearby chemical facilities, including providing increased outreach and inspections at regulated facilities to ensure facilities have measures in place to prevent chemical accidents. This investment includes \$4.96 million in payroll.
- (+\$500.0) This program increase is to upgrade and to support operations and maintenance of the existing RMP database.

Statutory Authority:

The Emergency Planning and Community Right-to-Know Act (EPCRA); the Clean Air Act (CAA) § 112(r); Clean Water Act (CWA) § 311(j)(5).

³⁰⁰ For additional information, please refer to: https://www.federalregister.gov/documents/2021/01/25/2021-01765/protecting-public-health-and-the-environment-and-restoring-science-to-tackle-the-climate-crisis.

TRI / Right to Know

Program Area: Information Exchange / Outreach Goal: Ensure Safety of Chemicals for People and the Environment Objective(s): Promote Pollution Prevention

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$12,689	\$13,206	\$13,675	\$469
Total Budget Authority	\$12,689	\$13,206	\$13,675	\$469
Total Workyears	38.5	37.0	37.0	0.0

Program Project Description:

EPA's success in carrying out its mission to protect human health and the environment is contingent on collecting and making available to the public timely, accurate, and relevant information. The Toxics Release Inventory (TRI) Program³⁰¹ supports EPA's mission by annually collecting and publishing for the public: release, other waste management (e.g., recycling), and pollution prevention (P2) data on TRI-listed chemicals and chemical categories that include almost 200 per- and polyfluoroalkyl substances (PFAS). Approximately 21,000 industrial and federal facilities report to TRI annually. The TRI Program is a premiere source of cross-media toxic chemical release information for communities, non-governmental organizations, industrial facilities, academia, and government agencies at the local, state, tribal, federal, and international levels. Using technological advances, the TRI Program has developed several analytical tools that provide the public with easy access, mapping, and analysis of information on TRI chemicals released or otherwise managed as waste at facilities in communities across the United States and its territories. Some of these tools incorporate demographic indicators such as low income, people of color, education level, linguistically isolated households, and young and elderly populations, as well as tribal land flags and risk indicators.

The Program collaborates with other EPA programs on sector analyses to describe relevant trends in pollutant releases, waste management, and P2 practices with respect to toxic chemicals and to support innovative approaches by industry and other partners to reduce pollution. As a robust, community-focused, annual, cross-media data set on toxic chemical information, the TRI lends itself to comparative analyses with other program-specific data managed by the Agency, providing insights that may not be apparent when viewing the data sets independently. Such insights are especially valuable when it comes to: (1) identifying opportunities based on TRI-reported, location-specific release trends to reduce toxic chemical releases in overburdened and underserved communities in accordance with the Administration's environmental justice (EJ) priorities, and (2) promoting TRI-reported P2 practices that reduce the release of toxic chemicals and/or emissions

³⁰¹ For additional information, please visit: http://www.epa.gov/tri/.

³⁰² Many per- and polyfluoroalkyl substances (PFAS) were added to the TRI chemical list as a component of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) when the Act was signed into law on December 20, 2019. The first year of TRI reporting these PFAS was calendar year 2020.

of greenhouse gases (GHGs). The TRI serves as a central component of EPA's strategy to increase access to environmental pollution information and enable communities, scientists, policymakers and other stakeholders to apply the information in their decisions and engagements to address impacts and deter adverse burdens, particularly to low-income and marginalized communities.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.2, Promote Pollution Prevention in the *FY 2022 – 2026 EPA Strategic Plan*.

In FY 2023, EPA will continue to enhance the regulatory foundation of TRI to ensure that communities have access to timely and meaningful data on toxic chemical releases and other waste management and pollution prevention activities at facilities. As part of this effort, the TRI Program will continue to clarify toxic chemical reporting requirements, pursue additional chemical listings, expand the scope of industry coverage, respond to petitions, improve the reporting experience, take steps to further optimize the quality of TRI data, explore enhanced access and analytical capability with respect to this valuable information, identify opportunities to reduce toxic chemical releases, and share and promote pollution prevention approaches with industry. This work is in support of the Administration's EJ priorities as the Program also will play an enhanced role in conducting analyses to support EPA's goals for overburdened and underserved communities with EJ concerns. Additionally, the Program will work to identify instances where TRI-reported P2 practices reduce releases of TRI-listed toxic chemicals and/or GHGs in alignment with the Administration's climate priorities.

EPA also will continue to provide reporting facilities with its online reporting application, *TRI-MEweb* ("*TRI Made Easy web*" reporting tool), to facilitate the electronic preparation and submission of TRI reports through EPA's Central Data Exchange (CDX), ³⁰³ which manages TRI access and authentication services and provides identity proofing for reporting facilities. *TRI-MEweb* has built-in functionality that helps to prevent facilities from making reporting errors. In addition, the TRI data collected by EPA are shared with states, tribes, and territories that are partners of the TRI Data Exchange (TDX). ³⁰⁴ EPA will continue to maintain *TRI-MEweb* and the TDX throughout FY 2023. The Agency also will continue to support the TRI Processing System (TRIPS) database, which is the repository for TRI data. As a key element of its data quality assurance strategy, in FY 2023, the Program will conduct at least 600 data quality checks to help optimize the accuracy and completeness of the reported data and thereby improve the Program's analyses and the utility of the data to the public. In FY 2023, EPA also will continue to improve its systems, processes, and products based on feedback from users (*i.e.*, communities; academia; industry; and state, tribal and local governments).

The Program also will continue to publish English and Spanish versions of the annual *TRI National Analysis*, ³⁰⁵ which describes relevant trends in toxic chemical releases and waste management practices and highlights innovative approaches by industry to reduce pollution. The Analysis will include industry sector profiles, parent company analyses, and TRI information reported from

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³⁰³ To access the CDX, please visit: https://cdx.epa.gov/.

³⁰⁴ For additional information, please visit: https://www.epa.gov/toxics-release-inventory-tri-program/tri-data-exchange.

³⁰⁵ To access the *TRI National Analysis*, please visit: https://www.epa.gov/trinationalanalysis. EPA publishes each National Analysis approximately six months after that year's data are reported.

facilities in specific urban communities, watersheds, and tribal lands. The TRI Program also will continue to make the preliminary data available to the public shortly after the reporting deadline as downloadable data files and through online analytical tools such as *Envirofacts*. The Program will continue to provide support to EPA's Enforcement and Compliance Assurance programs by supplying facility target lists developed through the comparison of TRI reporting with facility reporting to other EPA programs (e.g., air permits required by the Clean Air Act). The TRI Program will continue to foster discussions and collaborations in analyzing and using its data with stakeholders such as industry, government, academia, non-governmental organizations, and the public. Engagement will include organizing targeted webinars, and, if resources permit, hosting a TRI National Conference and launching a TRI University Challenge.

Section 7321 of the National Defense Authorization Act of 2020 requires EPA to assess certain Per- and Per-fluoroalkyl Substances (PFAS) to determine whether they meet Emergency Planning and Community Right-to-Know Act (EPCRA) Section 313 chemical listing criteria. During FY 2023, EPA will continue to assess these chemicals and develop associated hazard assessments to support any chemical listing activities. Further, in FY 2023, the TRI Program's information, data and analyses will support the Toxic Substances Control Act (TSCA) Program, helping to identify conditions of use and evaluate and estimate occupational, general population, and potentially exposed and susceptible subpopulation exposures for those chemicals undergoing risk evaluation and that are included on the TRI chemical list. This work altogether will assist Agency chemical programs in their prioritization work, from the identification of candidate chemicals for future risk evaluations to the support of other chemical assessments across program and regional offices, advancing the work of chemical safety agency-wide.

The TRI Program will additionally pursue chemical listings, including TSCA Work Plan chemicals and other substances of interest to the Agency that are not included on the TRI chemical list, as well as respond to TRI chemical listing petitions. Additional chemicals or sectors may be assessed for TRI listing suitability and associated listing actions, and as required by EPCRA, the Agency will respond to EPCRA chemical petitions regarding TRI within 180 days after receipt. ³⁰⁷ The quantity and complexity of petitions are unknown until submitted to EPA. EPA will continue with TRI rulemakings associated with two chemical petitions received during prior years and will respond to any chemical petitions received during FY 2023.

Because electronic systems that collect and disseminate TRI data largely have been developed, FY 2023 work will focus on the operations and maintenance of *TRI-MEweb*, TRIPS, and processes that contribute to quality control in the development of the annual *TRI National Analysis*. By leveraging agency cloud services, the TRI systems will improve system performance, reliability, efficiencies, portability, and administrative services (security, upgrades, patches, etc.). This also will improve integration/consistency with other cloud-based systems and applications and will provide quicker data processing. Moreover, this will enhance the capabilities of EPA's public-facing TRI analytical tools.

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³⁰⁶ EnviroFacts may be accessed at: https://enviro.epa.gov/.

³⁰⁷ Additional information on current petitions may be found at: https://www.epa.gov/toxics-release-inventory-tri-program/toxics-release-inventory-laws-and-regulatory-activities.

In FY 2023, the TRI Program will analyze and identify facilities and sectors releasing TRI-listed substances proximal to overburdened and underserved communities (using functionalities within EPA's analytical tools, such as TRI Toxics Tracker and *EJScreen*). The Program also will develop maps and other products to help facilitate exploration and understanding of potential impacts from chemical releases to surrounding communities including those that might be more susceptible to climate change impacts (i.e., sea level rise). TRI will initiate this work for at least two EPA Regions and will provide outreach and training in how to use and interpret the information within those locations.

Additionally, TRI reporting includes information on institutional/firm environmental stewardship, P2, and other sustainability practices and activities (e.g., voluntary climate mitigation-, adaptation-or resilience-oriented work) undertaken by facilities during the reporting year. TRI's P2 reporting data³⁰⁸ include thousands of instances of source reduction implementation and other sustainability activities by facilities, which often reflect economic benefits coupled with improved environmental performance. TRI's P2 data tools have a wide range of capabilities to help identify and amplify improvement to environmental practices, and the Program will continue to conduct analyses of these practices and develop profiles of these environmental improvements, which can be useful for P2 practitioners including those seeking to advance sustainability and strengthen the resilience of facilities near overburdened and underserved communities with EJ concerns. The Program will also continue to support the Agency's P2 Program, and other agency source reduction and sustainability programs, specifically efforts to advance P2 best practices among national emphasis areas including tools to advance priorities such as the P2-EJ Facility Mapping Tool.³⁰⁹

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$442.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$27.0) This program change is an increase in contract resources to support IT analytical tools that allow stakeholders to view and analyze the data reported to TRI in support of environmental justice and other initiatives.

Statutory Authority:

Emergency Planning and Community Right-to-Know Act (EPCRA) § 313; Pollution Prevention Act of 1990 (PPA) § 6607.

³⁰⁸ For additional information, please visit: https://www.epa.gov/tri/p2.

³⁰⁹ To access the P2 EJ Facility Mapping Tool, please visit https://www.epa.gov/p2/p2-ej-facility-mapping-tool.

Tribal - Capacity Building

Program Area: Information Exchange / Outreach Goal: Take Decisive Action to Advance Environmental Justice and Civil Rights Objective(s): Promote Environmental Justice and Civil Rights at the Federal, Tribal, State and Local Levels

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$12,945	\$12,902	\$16,386	\$3,484
Total Budget Authority	\$12,945	\$12,902	\$16,386	\$3,484
Total Workyears	72.8	75.6	87.9	12.3

Program Project Description:

EPA is responsible for protecting human health and the environment under federal environmental statutes. Under the Agency's 1984 Indian Policy, ³¹⁰ EPA works with federally recognized tribes on a government-to-government basis, in recognition of the federal government's trust responsibility to tribes, to implement federal environmental programs in Indian country.

To do this, EPA will:

- use key environmental justice principles, such as, equity, meaningful involvement, and fair treatment as it prioritizes implementation of EPA directly implemented programs, and for other activities:
- fully consider ways in which program funding can best be used to address climate change concerns to build climate resiliency for federally recognized tribes, and;
- work to enhance the integration of tribal treaty rights and reserved rights into EPA decision-making and regulatory development.

This program also supports the Categorical Grant: Tribal General Assistance Grants Program.

EPA's American Indian Environmental Office leads the agencywide effort to ensure environmental protection in Indian country. Please see http://www.epa.gov/tribal for more information.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Promote Environmental Justice and Civil Rights at the Federal, Tribal, State and Local Levels in the *FY 2022-2026 EPA Strategic Plan*.

³¹⁰ EPA Policy for the Administration of Environmental Programs on Indian Reservations, available at https://www.epa.gov/tribal/epa-policy-administration-environmental-programs-indian-reservations-1984-indian-policy.

Overall, the Agency continues to make steady progress towards strengthening human health and environmental protection in Indian country. EPA will further the following priorities in FY 2023:

- strengthening tribal partnerships and engagements, including through tribal consultation,
- building tribal capacity to administer and meaningfully participate in environmental programs,
- directly implementing programs in Indian country for equitable environmental protection, and
- enhancing the protection of tribal treaty rights in EPA activities.

Tribal Consultation: In working with the tribes, EPA follows its *Policy on Consultation and Coordination with Indian Tribes.*³¹¹ The Consultation Policy builds on EPA's 1984 Indian Policy and establishes clear agency standards for a consultation process promoting consistency and coordination. From FY 2011 through FY 2022, EPA expects to complete over 860 Tribal Consultations, an important agency milestone under the EPA Tribal Consultation Policy. EPA anticipates completing 110 tribal consultations in FY 2023. In FY 2023, EPA will continue to support the Agency's web-based Tribal Consultation Opportunities Tracking System, a publicly accessible database used to communicate upcoming and current EPA consultation opportunities to tribal governments. The system provides a management, oversight, and reporting structure that helps ensure accountability and transparency.

Capacity Building: EPA will continue to provide assistance and to support mechanisms for tribes to pursue developing and implementing federal environmental programs, including the "treatment in a manner similar to a state" (TAS) process and the use of the Direct Implementation Tribal Cooperative Agreement (DITCA) authority. The Agency will continue to provide technical and financial assistance to ensure tribal governments have the opportunity to build the capacity to meaningfully participate and engage in environmental protection activities. As of March 2022, EPA has approved 100 TAS regulatory program delegations to tribes, including 21 approvals for compliance and enforcement authority. EPA had 16 DITCAs with tribes in place in FY 2022.

Indian Environmental General Assistance Program Capacity Building Support: General Assistance Program (GAP) grants to tribal governments help build the basic components of a tribal environmental program. The Agency manages GAP grants according to its *Guidance on the Award and Management of General Assistance Agreements for Tribes and Intertribal Consortia*. In FY 2023, EPA will continue to administer GAP financial assistance to build tribal capacity and address environmental issues in Indian country. EPA's work in FY 2023 also will continue to enhance EPA-Tribal partnerships through development and implementation of EPA-Tribal Environmental Plans (ETEPs) with a continued focus on tracking and reporting measurable results of GAP-funded activities. GAP funding also continues to support EPA Performance Partnership Grant (PPG) goals. EPA will strive to incorporate environmental justice and climate change considerations in these activities.

GAP Performance Measurement: In FY 2020, EPA completed an evaluation of the Program implementation under the 2013 GAP guidance and anticipates new Guidance to be effective FY

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³¹¹ Please refer to: https://www.epa.gov/tribal/forms/consultation-and-coordination-tribes.

³¹² Please refer to https://www.epa.gov/tribal/2013-guidance-award-and-management-general-assistance-agreements-tribes-and-intertribal for further information.

2023. EPA will adjust the performance management application to align with the revised guidance, after it is finalized in FY 2023, and begin compiling and analyzing data. The information technology-based performance application will provide a data-driven basis for supporting funding decisions, funding priorities, and contribute to program accountability.

Direct Implementation: In the absence of an authorized tribal program, EPA will continue to provide federal environmental program protections in Indian country by directly implementing programs. In FY 2023, EPA will continue to evaluate its direct implementation responsibilities and activities, on a program-by-program basis, in Indian country and make the data and information it relies upon available through EPA's EJScreen application.

Performance Measure Targets:

(PM EC41) Percentage of EPA Tribal consultations that may affect Tribal treaty rights that consider those rights as part of the consultation.	FY 2022 Target	FY 2023 Target
	20	25

(PM E21) Number of significant actions taken by EPA programs with	FY 2022	FY 2023
direct implementation authority that will result in measurable	Target	Target
improvements in Indian country.	No Target	25
	Established	25

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$1,186.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,298.0 / +12.3 FTE) This program change is an increase in resources and FTE to support core work in the capacity building program with an emphasis on addressing the climate crisis. This investment includes \$2.171 million in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

International Programs

International Sources of Pollution

Program Area: International Programs Goal: Tackle the Climate Crisis

Objective(s): Advance International and Subnational Climate Efforts

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$6,409	\$6,746	\$11,758	\$5,012
Total Budget Authority	\$6,409	\$6,746	\$11,758	\$5,012
Total Workyears	29.6	32.4	39.4	7.0

Program Project Description:

The United States works with international partners to address global sources of pollution, including greenhouse gases, as well as the impacts of pollution from the United States on other countries and the global environment. International sources of pollution impact air, water, land, the oceans, food crops, and food chains. Healthy environments, ecosystems, and communities provide the foundation for protecting human health and the environment and creating sustainable economic development, job opportunities, and sustainable growth.

Tackling the Climate Crisis, Accelerating Environmental and Economic Justice

EPA works with international partners, such as foreign governments and international organizations, to deploy assistance that can strengthen on the ground action to tackle the climate crisis, reduce transboundary pollution that impacts local communities and travels through the environment to impact other communities across the globe, and that strengthen the fundamental environmental rule of law. These measures typically rely upon U.S. best practices, technical knowledge and expertise that promote U.S. priorities such as protecting underserved and vulnerable communities. EPA's international mission is essential to addressing transboundary pollution and adverse environmental impacts in the United States and helps facilitate a cleaner and healthier environment around the world. Strengthening environmental protection abroad so that it is on par with practices in the U.S. helps build a level playing field for industry and promotes opportunities for technologies and innovation. EPA's international programs also play an important role in fulfilling national security and foreign policy objectives and create a platform for promoting U.S. innovation and showcasing state and local breakthrough programs and policies.

An important example of this work is EPA's engagement in the Group of Seven (G7) and the Group of Twenty (G20) through environment ministerial meetings, which negotiate outcomes on key EPA issues such as climate change, food waste, marine litter, resource efficiency, and air quality. EPA's engagement with international financial institutions, United Nations (UN) entities, and the Organization for Economic Cooperation (OECD) has helped advance recognition of the critically important role of environmental factors, including air pollution and toxic chemicals, in the global burden of non-communicable diseases (NCDs), and of the role that sound environmental

laws can play in reducing these risks. Additionally, EPA's participation in the North American Commission for Environmental Cooperation (CEC) provides regional and international leadership to advance environmental protection, human health, and sustainable economic growth.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Advance International and Subnational Climate Efforts in the FY 2022 – 2026 EPA Strategic Plan.

In FY 2023, EPA will continue to engage both bilaterally and through multilateral institutions to improve international cooperation to reduce greenhouse gases, increase resilience and adaptive capacity as well as prevent and address the transboundary movement of conventional pollution and waste.

Climate and Equity

Specifically, in line with the FY 2022 – 2026 EPA Strategic Plan, EPA will provide technical assistance through the transfer of tools to address climate change with partner countries, with the goal of leveling the playing field, addressing disproportionate adverse human health and environmental impacts in vulnerable and underserved communities, and helping to ensure that all countries make meaningful progress in implementing their nationally determined contributions under the Paris Agreement. This helps fulfill EPA's commitment to implementing, by 2026, at least 40 international climate engagements that result in an individual partner commitment or action to reduce greenhouse gas (GHG) emissions, adapt to climate change, or improve resilience in a manner that promotes equity. These actions will be consistent with EPA's draft International Climate Strategy Plan. Actions will include re-engaging the Secretariat of Partnership for Clean Fuels and Vehicles (PCFV) to identify project partners to assist in transitioning to electric mobility solutions in key countries, particularly in underserved and vulnerable communities, to finalize a high ambition workplan with the Secretariat. Additionally, EPA will initiate stakeholder consultations with key priority countries on critical mineral supply-chain transparency guidelines, focused on minerals needed for low carbon technology. For the pilot programs, EPA will provide meaningful technical assistance internationally on climate mitigation, adaptation, and resilience through expertise and capacity to key EPA partners and priority countries identified by the Biden-Harris Administration. This will enable countries to set and meet ambitious greenhouse gas reductions. In implementing these pilot programs, EPA will seek opportunities to engage with partner governments and organizations to develop and use best practices and tools to address the unique needs and challenges of vulnerable and underserved communities.

In FY 2023 the Agency will work in the Arctic Council to provide in-kind expertise and help to identify external resources to screen sources of black carbon that may impact local health conditions, with the potential of expanding across a wider range of Alaskan Native Villages (ANVs). EPA also will co-chair the Arctic Council expert group on short-lived climate pollutants (SLCP) to facilitate the development and implementation of projects to reduce SLCP emissions in and near the arctic. EPA also will continue to share Agency tools that can help partners increase their adaptative capacity to climate change and understand the impacts of climate change on

vulnerable and underserved communities through the UN Environment Program, the Global Adaptation Network and existing and new bilateral work programs.

Marine Litter

EPA will continue to engage internationally to prevent and reduce marine litter, including plastics, through sharing best practices and U.S. innovation as well as through existing or new global instruments. Marine plastic litter is an increasingly prominent global issue that can negatively impact water quality, tourism, industry, and public health in the United States. Further, calls for the development of a new binding international arrangement of marine plastic litter are mounting, and EPA, working with other federal departments, will continue to provide leadership and expertise on how to best address land-based sources of marine litter, including plastics. Since 80 percent of plastic marine litter comes from land-based sources of waste, 313 countries with inadequate waste management contribute to the pollution in our shared oceans. Improving integrated waste management in these countries will be a priority.

In FY 2023, EPA will share tools and provide technical assistance, including through efforts related to Trash Free Waters, to key contributing countries in Asia and build on past projects in Latin America and the Caribbean. Technical support may include developing national, regional, and local action plans to reduce leakage of trash to the environment; identifying steps to implement relevant and applicable waste collection/management systems; and modest implementation projects where possible. In addition, EPA will support the development of an information clearinghouse on marine litter to be hosted by the United Nations Environment Program (UNEP). EPA will continue to collaborate with leaders in innovation in the domestic stakeholder community to identify ways to leverage efforts to tackle this pressing global problem. EPA will continue to strengthen actions with a regional focus on major source countries in Southeast Asia and key partners in Latin America and the Caribbean, and by partnering with UNEP leaders in implementing and disseminating governance measures, policies, and technology to prevent marine litter.

Air Quality

EPA will engage with key priority countries and UN institutions to address air pollution that contributes significant pollution to the domestic and international environment. For example, several Asian countries are implementing national air quality monitoring, planning, and control strategies with advice and lessons learned from the United States. Environmental policies adopted and implemented overseas will improve competitiveness for U.S. businesses, drive demand for U.S. emissions control technologies, and expand exports of U.S. environmental goods and services, which will create green jobs at home and improve air quality conditions in the United States.

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³¹³ J. R. Jambeck, R. Geyer, C. Wilcox, T. R. Siegler, M. Perryman, A. Andrady, R. Narayan, and K. L. Law, "Plastic waste inputs from land into the ocean," Science, 2015, Volume 347, Number 622

Food Waste

In FY 2023, EPA will continue to cooperate with the United Nations and the Office of Management and Budget to ensure that methodologies used to track international progress on reducing food waste accurately reflect U.S. progress and to better understand the climate benefits of reducing food waste. Approximately eight to ten percent of global greenhouse gas emissions are from food loss³¹⁴ in the agricultural supply chain and consumer food waste. The Agency will continue to advance food waste efforts, which is an increasing portion of landfill waste in rapidly urbanizing cities in developing countries. The problems of food insecurity, in particular for the most vulnerable, have been exacerbated by COVID-19, thus underscoring the need for greater attention to reducing food waste. For example, EPA will bring together experts from the U.S. and partner country governments, non-governmental organizations (NGOs), academia, the private sector, and the UN to promote programs, best practices, and technologies related to food loss and waste.

Chemicals

EPA also will maintain efforts to reduce environmental threats to U.S. citizens from global contaminants impacting air, water, and land. EPA will continue technical and policy assistance for global, regional, and bilateral efforts to address international sources of harmful pollutants, such as mercury. Since 70 percent of the mercury deposited in the U.S. comes from global sources, 315 both domestic efforts and international cooperation are important to address mercury pollution. EPA will continue to work with international partners and key countries to fully implement obligations under the Minamata Convention on Mercury to protect the U.S. population from mercury emissions originating in other countries, including from artisanal and small-scale gold mining.

With respect to mercury, EPA's measures show that partner countries are on track to develop National Action Plans (NAPs) that demonstrate how they will reduce or eliminate the use of mercury in the Artisanal and Small-Scale Gold Mining (ASGM) sector. ASGM is the largest source of global mercury releases³¹⁶ and the development of NAPs called for by the Minamata Convention on Mercury is a critical first step to help major emitters reduce the use and release of mercury into the environment.

EPA will continue to play a leadership role in the Lead Paint Alliance to increase the number of countries that establish effective laws to limit lead in paint, which remains a priority health concern following successful efforts to eliminate lead in gasoline worldwide. EPA consistently meets objectives for reviewing the development of laws in other countries to control their levels of lead in paint, in a manner consistent with U.S. regulations. In doing so, these countries will not only reduce the exposure of their children to lead and prevent the subsequent health effects of this potent developmental neurotoxin, but also will reduce the amount of lead-based paint on products in international commerce that often reach U.S. markets.

³¹⁴ For more information, please see: Intergovernmental Panel on Climate Change (IPPC) Special Report on Climate Change and Land, Chapter 5 Food Security, pg 440, https://www.ipcc.ch/site/assets/uploads/sites/4/2021/02/08 Chapter 5 3.pdf.

³¹⁵ For more information, please see: https://www.epa.gov/international-cooperation/minamata-convention-mercury and www.mercuryconvention.org.

³¹⁶ For more information, please see: Global mercury assessment | UNEP - UN Environment Programme.

In addition, EPA will continue to work with the Arctic Council to further develop a joint project proposal on per- and polyfluoroalkyl substances (PFAS). This effort will focus on aqueous filmforming fire-fighting foams (AFFF) in arctic airports through in-kind technical expertise.

Performance Measure Targets:

(PM E13a) Number of climate engagements that result in an individual	FY 2022	FY 2023
partner commitment or action to reduce GHG emissions, adapt to climate	Target	Target
change, or improve resilience in a manner that promotes equity.	8	10

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$285.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$1,227.0 / +7.0 FTE) This net program change is an increase to address international sources of pollution that impact the nation's air, water, land, the oceans, food crops / food chains, and climate change through coordination with international partners. This includes \$1.391 million in payroll.
- (+\$3,500.0) This program change is an increase for climate change work, including climate change mitigation. This will include indigenous engagement climate mitigation.

Statutory Authority:

In conjunction with the National Environmental Policy Act (NEPA) § 102(2)(F): Clean Air Act § 103(a); Clean Water Act § 104(a)(1)-(2); Safe Drinking Water Act (SDWA) § 1442(a)(1); Resource Conservation and Recovery Act (RCRA) § 8001(a)(1); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) §§ 17(d), 20(a); Toxic Substances Control Act (TSCA) §10(a); Marine Protection, Research, and Sanctuaries Act (MPRSA) § 203(a)(1); E.O. 13547; E.O. 13689; U.S.-Mexico-Canada Agreement (USMCA) Implementation Act, 19 U.S.C. §§ 4501-4372.

Trade and Governance

Program Area: International Programs
Goal: Tackle the Climate Crisis

Objective(s): Advance International and Subnational Climate Efforts

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$5,894	\$5,292	\$6,187	\$895
Total Budget Authority	\$5,894	\$5,292	\$6,187	\$895
Total Workyears	12.7	15.3	18.0	2.7

Program Project Description:

EPA has played a key role in trade policy development since the 1972 Trade Act mandated that the U.S. Trade Representative engage in interagency consultations. Specifically, EPA is a member of the Trade Policy Staff Committee, the Trade Policy Review Group, and relevant subcommittees—interagency mechanisms that provide advice, guidance, and clearance to the Office of the U.S. Trade Representative in the development of U.S. international trade and investment policy. Trade influences the nature and scope of economic activity and therefore the levels of pollutant emissions and natural resource use. EPA's role in trade negotiations is to ensure that agreements have provisions that are consistent with the Administration's environmental protection goals while not putting the United States at an economic disadvantage. EPA offers technical assistance and environmental governance capacity building for trade partners to support implementation of environmental commitments made in Free Trade Agreements. EPA also provides technical expertise on environmental governance and policy for international financial institutions, including environmental policy reviews and project-level environmental guidance.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Advance International and Subnational Climate Efforts in the FY 2022 – 2026 EPA Strategic Plan.

Free Trade Agreements and United States-Mexico-Canada Agreement (USMCA)

In FY 2023, EPA will continue its participation in the North American Commission for Environmental Cooperation (CEC), which provides regional and international leadership to advance environmental protection, human health, and sustainable economic growth in North America. EPA also will continue work on implementation of the Environment Chapter of the United States-Mexico-Canada Agreement (USMCA) and other free trade agreements. EPA activities will include monitoring and verifying provisions pertaining to global and national environmental requirements in the agreement and providing subject matter expertise. EPA will continue active participation in the United States Trade Representative (USTR) led Interagency

Environment Committee for Monitoring and Environment (IECME) established to promote Mexican and Canadian compliance with their environmental obligations.

In addition, EPA will continue to play an active role in Free Trade Agreements (FTAs), and in the development of new FTAs and in the delivery of technical assistance to support implementation of environmental commitments within them. At present, EPA is working on the development of a new FTA, with the governments of the United Kingdom through the USTR-led interagency process. Further, given the President Biden 2021 Trade Agenda's emphasis on achieving climate change objectives and supporting underserved communities, including possibly through trade measures, EPA will provide technical advice and input on the implications of various tools such as carbon border adjustments and environmental goods agreements, and provide governance capacity building.

In FY 2023, EPA will continue to work with partners (including the Treasury Department, State Department, U.S. Agency for International Development, and the U.S. International Development Finance Corporation), to improve environmental governance of U.S. funded international development projects. EPA will support the environmental performance of international financial institutions such as the development of environmental safeguards, including climate performance.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$274.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$621.0 / +2.7 FTE) This program change is an increase in resources and FTE to provide support and capacity building for regional and international Trade and Governance programs addressing climate change and environmental justice. This investment includes \$502.0 thousand in payroll.

Statutory Authority:

In conjunction with the National Environmental Policy Act (NEPA) § 102(2)(F): Clean Air Act § 103(a); Clean Water Act § 104(a)(1)-(2); Safe Drinking Water Act (SDWA) § 1442(a)(1); Resource Conservation and Recovery Act (RCRA) § 8001(a)(1); Federal Insecticide Fungicide and Rodenticide Act (FIFRA) §§ 17(d), 20(a); Toxic Substances Control Act (TSCA) §10(a); Marine Protection, Research, and Sanctuaries Act (MPRSA) § 203(a)(1); E.O. 12915; E.O. 13141; E.O. 13277; U.S.-Mexico-Canada Agreement (USMCA) Implementation Act, 19 U.S.C. §§ 4501-4372.

US Mexico Border

Program Area: International Programs Goal: Tackle the Climate Crisis

Objective(s): Advance International and Subnational Climate Efforts

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$2,818	\$2,837	\$3,275	\$438
Total Budget Authority	\$2,818	\$2,837	\$3,275	\$438
Total Workyears	13.3	12.4	14.4	2.0

Program Project Description:

The two- thousand-mile border between the United States and Mexico is one of the most complex and dynamic regions in the world. This region accounts for three of the 10 poorest counties in the U.S., with an unemployment rate 250-300 percent higher than the rest of the country. In addition, over 430 thousand of the 14 million people in the region live in 1,200 colonias, which are unincorporated communities characterized by substandard housing and unsafe drinking water or wastewater systems. In 2018 the poverty rate along the two-thousand-mile border was about twice the U.S. average. Population growth indexes show a trend of increasing growth, related among other factors to the influx of migrants from different regions.

This trend has increased the pressure on basic infrastructure and services in border cities, which struggle to keep up with population growth. This includes unincorporated communities characterized by substandard housing and unsafe drinking water. Colonias also exist in Arizona, California, New Mexico and Texas. The adoption of the Border Programs has gone a long way to protect and improve the health and environmental conditions along a border that extends from the Gulf of Mexico to the Pacific Ocean.

Building on the successes of the Border 2020 Program, the Border 2025 Program lays out a roadmap for continued environmental cooperation over the next several years. The Border 2025 Program, like its predecessors, continues to emphasize local priority-setting, focuses on measurable environmental results, and encourages broad public participation. Specifically, Border 2025 builds on earlier program work³¹⁹, which includes removing more than 13 million scrap tires from the border, establishing drinking water connections for more than 54,000 homes and adequate wastewater connections for over half a million homes; in addition to highlighting regional areas where environmental improvements are most needed, establishing thematic goals supporting the

http://www.nnirr.org/drupal/sites/default/files/unm the us mexico border region at a glance.pdf

³¹⁷ For additional information, please see:

³¹⁸ For additional information, please see: https://www.dallasfed.org/~/media/documents/cd/pubs/lascolonias.pdf.

³¹⁹ For additional information, please see: https://www.epa.gov/sites/default/files/2021-05/documents/final b2020 acc report may 24 2021.pdf.

implementation of projects, considering new fundamental guiding principles, and encouraging the achievements of more ambitious environmental and public health goals.

The Border 2025 Program identifies four long-term goals to address the serious environmental and environmentally related public health challenges, including the impact of transboundary transport of pollutants in the border region. These strategic goals are: Reduce Air Pollution; Improve Water Quality; Promote Sustainable Materials and Waste Management; Clean Sites; and Improve Joint Preparedness for and Response to Hazardous Environmental Emergencies.

EPA and the Secretariat of Environment and Natural Resources (SEMARNAT) will continue to closely collaborate with the 10 border states (four U.S./six Mexican), 26 U.S. federally recognized Indian tribes and local communities in prioritizing and implementing projects that address their particular needs.

Note: The border water and wastewater infrastructure programs are described in the State and Tribal Assistance Grants (STAG) appropriation, Infrastructure Assistance: Mexico Border Program.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Advance International and Subnational Climate Efforts in the FY 2022-2026 EPA Strategic Plan.

Air Pollution:

In FY 2023, EPA will continue to focus on air pollution reductions in binational airsheds, work on reducing emissions through implementing policy-based or technology-based programs, maintaining effective air quality monitoring networks and timely access to air quality data along the border region. This effort to meet health-based air quality standards, especially for particulate matter and ozone, is expected to mitigate negative effects on public health by deploying innovative strategies or technologies and building public awareness of associated health risks, including higher incidence rates for asthma and increased health-related school absences for children and vulnerable populations.

EPA and SEMARNAT will continue to build on the successful air quality efforts conducted under the Border 2020 Program, which has resulted in complete greenhouse gas emissions inventories for each Mexico border state and improved public health, especially in underserved communities. In addition, building upon over 20 years of binational air quality success within the shared New Mexico, Texas, and Chihuahua air basin, local coordinated efforts will advance work to address mobile sources at two designated Border cities.

EPA will assist in improved compliance with vehicle emission standards, establishment of and compliance with vehicle inspection and maintenance programs, increased data-sharing on used vehicle emissions testing, and strengthened Green Freight Programs such as Transporte Limpio (Mexico) and SmartWay (United States). The benefit in cooperation with Mexican border cities has a high positive impact on Texas' largest populated border city of El Paso in protecting U.S.

citizens and vulnerable populations, as Juarez and El Paso make up a metropolitan area that shares and breathes the same air. Along the U.S. border, California, Arizona, and New Mexico have completed Climate Change Action Plans.

Water Management:

In FY 2023, the Agency will continue to address border water management in the Tijuana River Watershed. The United States-Mexico-Canada Trade Agreement (USMCA) authorizes and directs EPA to coordinate with specific federal, state, and local entities to plan and implement high priority infrastructure projects that address transboundary pollution affecting San Diego County. EPA will advance implementation of projects to prevent and reduce the levels of trash and sediment from entering high priority binational watersheds. Other projects that prevent/reduce marine litter should primarily focus on preventing waste at the source through improvements to solid waste management systems, education campaigns, and monitoring as well as reducing trash from entering the aquatic environment through the capture of litter using river booms in known watershed litter hot spots.

Sustainable Materials Management:

In FY 2023, EPA will continue to collaborate and partner on sustainable materials management demonstration projects to prevent waste and improve the recovery of materials, such as plastic, e-waste, and scrap tires, through public-private partnership programs and infrastructure investments in the border region to mitigate public health and environmental impacts and avoid costly cleanup efforts. Each region of Mexico's northern border has different economic, social, and cultural situations, with different capacities to mitigate the generation and management of waste and secondary materials.

Planning:

EPA will continue to work to increase institutional capabilities in planning and technical assistance, enabling the development of programs, projects, or actions, which take into account the life cycle analysis of natural resource economics, manufacturing, transport, and other market factors to more effectively harvest and use materials and avoid them from being lost to landfills.

Additionally, the United States and Mexico will work together to enhance joint preparedness for environmental response and facilitate easier transboundary movement of emergency response equipment and personnel by activities such as updating Sister City Plans with preparedness and prevention and providing training to emergency responders on preparedness and prevention related activities. As part of the efforts for binational emergency preparedness and response, work will continue updating of the Mexico-U.S. Joint Contingency Plan in both Spanish and English. In addition, both countries will coordinate efforts in binational border wide work.

Performance Measure Targets:

(PM E13b) Number of Border 2025 actions implemented in the U.SMexico	FY 2022	FY 2023
Border area to improve water quality, solid waste management and air	Target	Target
quality including those that address climate change, and advance	3	10
emergency response efforts.	3	10

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$128.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$310.0 / +2.0 FTE) This net program change is an increase to support efforts in mitigating pollution and addressing climate change related activities along the United States and Mexico Border. To address the needs in the region and in support of the Border 2025 program priorities, this effort continues to focus on smaller scale sustainability and core capacity building projects designed to improve the environment and protect the health of the nearly 14 million people living along the U.S.-Mexico border. This investment includes \$354.0 thousand in payroll.

Statutory Authority:

In conjunction with the 1983 Agreement between the United States of America and the Mexican United States on Cooperation for the Protection and Improvement of the Environment in the Border Area (La Paz Agreement) and National Environmental Policy Act (NEPA) § 102(2)(F): Clean Air Act § 103(a); Clean Water Act § 104(a)(1)-(2); Safe Drinking Water Act (SDWA) §§ 1442(a)(1); Resource Conservation and Recovery Act (RCRA) § 8001(a)(1); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) §§ 17(d), 20(a); Toxic Substances Control Act (TSCA) § 10(a); Marine Protection, Research, and Sanctuaries Act (MPRSA) § 203(a)(1); U.S.-Mexico-Canada Agreement (USMCA) Implementation Act, 19 U.S.C. §§ 4501-4372.

IT/ Data Management/ Security

Information Security

Program Area: IT / Data Management / Security Cross-Agency Mission and Science Support

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	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$6,765	\$8,285	\$23,739	\$15,454
Hazardous Substance Superfund	\$752	\$659	\$7,859	\$7,200
Total Budget Authority	\$7,516	\$8,944	\$31,598	\$22,654
Total Workyears	16.6	13.1	17.1	4.0

Program Project Description:

Digital information is a valuable national resource and a strategic asset that enables EPA to fulfill its mission to protect human health and the environment. The Information Security Program's mission is to protect the confidentiality, integrity, and availability of EPA's information assets. The information protection strategy includes, but is not limited to, risk management, oversight, and training; network management and protection; and incident management.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*. EPA will work toward full compliance with the five high priority directives (Adoption of Multifactor Authentication, Encryption of Data At Rest, Encryption of Data In Transit, Zero Trust Architecture, and Event Logging) in Executive Order (EO) 14028: *Improving the Nation's Cybersecurity*. ³²⁰

Cybersecurity is a serious challenge to our Nation's security and economic prosperity. Effective information security requires vigilance and the ability to quickly adapt to new challenges. EPA maintains a robust, dynamic approach to cybersecurity risk management, governance, and oversight. In FY 2023, to further strengthen the Agency's security posture and to expand its risk management, continuous monitoring, security incident response programs, and to implement EO 14028, EPA requests an additional investment of \$15.5 million and 4.0 FTE. The Agency will continue its partnerships with public and private sector entities to promote the adoption of cybersecurity best practices and reporting to the White House and Congress on the status of these initiatives.

EPA will continue to strengthen information technology (IT) assets and develop resiliency against potential cybersecurity threats. This work includes increasing implementation of Multifactor Authentication to strengthen access controls to data and increasing implementation of encryption for Data at Rest and Data in Transit to protect data. EPA has prioritized investments in specific

³²⁰ For more information on EO 14028, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/05/12/executive-order-on-improving-the-nations-cybersecurity/.

capabilities that protect and defend the most sensitive systems and information, including those designated as high-value assets. These investments will ensure protections are in place commensurate with the impact of their potential compromise.

Risk Management, Oversight, and Training:

In FY 2023, EPA will continue to include cybersecurity and privacy components in ongoing senior leadership program reviews. These reviews enhance Chief Information Officer (CIO) oversight by enabling better risk area determination and targeted improvement direction to system and mission program managers. While EPA programs and regions maintain responsibility for improving their performance in specific cybersecurity measures, EPA's senior leadership routinely reviews performance results and potential challenges for achieving continuous improvement.

In FY 2023, the Agency will continue to collect Federal Information Security Modernization Act (FISMA)³²¹ metrics and evaluate related processes, tools, and personnel to identify gaps and opportunities for improvement. EPA's CIO, who also is the Senior Agency Official for Privacy (SAOP), in coordination with the Chief Information Security Officer, will continue to monitor and report on these metrics, in line with OMB Memorandum M-22-05 Fiscal Year 2021-2022 Guidance on Federal Information Security and Privacy Management Requirements.³²²

The Agency will continue to update policies and procedures in line with the National Institute of Standards and Technology (NIST) in compliance with the release of Special Publications 800-53r5, Security and Privacy Controls for Information Systems and Organizations.³²³ These updates will help to implement a series of controls to address increased threats in the information environment.

In compliance with OMB Memorandum M-21-30, *Protecting Critical Software Through Enhanced Security Measures*, ³²⁴ the Agency continues to work on refinements to improve the ability to track and report on critical software used by the Agency in compliance with Federal Information System Reporting and OMB direction.

EPA will further enhance Agency-specific role-based training to ensure personnel in key cybersecurity roles have the skills, knowledge, and capabilities to effectively support EPA's cybersecurity posture.

Network Management and Protection:

In accordance with OMB Memorandum M-22-09 Moving the U.S. Government Toward Zero Trust Cybersecurity Principles,³²⁵ EPA will continue to review and improve controls across several

³²¹ Including those found in Federal Information Security Modernization Act of 2014 and Federal Information Security Cybersecurity Act of 2015.

³²² For more information, please see https://www.whitehouse.gov/wp-content/uploads/2021/12/M-22-05-FY22-FISMA-Guidance.pdf.

³²³ For more information, please see: https://csrc.nist.gov/publications/detail/sp/800-53/rev-5/final.

³²⁴ For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/08/M-21-30.pdf.

³²⁵ For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2022/01/M-22-09.pdf.

pillars as outlined in the Zero Trust Architecture: protecting identity management capabilities through authentication infrastructure and system configurations. Agency staff will continue to use enterprise-managed identities to access the applications they use in their work and evaluate current solutions to ensure they are resistant to malicious phishing campaigns and can protect EPA assets from sophisticated online attacks. The Agency will continue streamlining processes for hardware and software inventory management, including the implementation of a Configuration Management Database. The Agency will continue to assess existing Encryption for Data at Rest and Data in Transit implementation and work to optimize these encryption capabilities to ensure critical information and network traffic is encrypted. EPA also will embark on an enterprise effort to perform detailed analysis of isolated environments and work on integrating those environments with continuous monitoring capabilities to reduce risk.

In FY 2023, EPA will continue to strengthen cloud security monitoring and access to sensitive data, cyber incident response, and cloud platform management services, which will enable remote workers to securely use systems and services in the cloud while also improving application performance and reducing costs associated with Trusted Internet Connections (TIC). The Agency also will mature use of web content filtering tools to prevent malicious and unauthorized web content from impacting EPA systems and users. The Agency will continue to build its Insider Threat Program for the unclassified network to monitor Privileged Users and Systems Administrators activity, as recommended by several cybersecurity assessments, and to monitor and report on EPA networks and systems.

By moving to Zero Trust Architecture, EPA can further strengthen network resiliency and reliability. The development of networks which can resist malevolent actions regardless of their origin is an information security priority. Zero Trust Architecture will grant authorized users with full access to the tools and resources needed to perform their jobs but limit further access to unnecessary areas. Proper permissions for a given user's needs is a critical component of Zero Trust Architecture and coding for more granular control over the network environment is an information security priority.

Incident Management:

Cyberattacks across critical infrastructure sectors are rapidly increasing in volume and sophistication, impacting both IT and operational technology systems. EPA's Agency IT Security and Privacy (AITSP) Program enables agencywide implementation, management, and oversight of the CIO's Information Security and Privacy Programs through continuous monitoring functions. Continuous monitoring capabilities, which serve to identify and address security vulnerabilities and incidents quickly, are vital to ensure that EPA's information environment remains safe.

In FY 2023, EPA will continue to support the ongoing implementation of capabilities for data labeling and data loss prevention, as well as remote computer imaging and forensics, all of which

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³²⁶ For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2019/09/M-19-26.pdf.

³²⁷ These assessments include Annual Assessments and Classified briefings with the Department of Homeland Security and EPA's Office of Homeland Security, as well as a 2017 OIG Report, available at: https://www.epa.gov/sites/production/files/2017-10/documents/epaoig_20171030-18-p-0031.pdf.

will improve security information and event management by collecting, synthesizing, managing, and reporting cybersecurity events for systems across the Agency.

The Information Security Program supports EPA's Security Operations Center (SOC), which manages the Computer Security Incident Response Capability (CSIRC) processes to support identification, response, alerting, and reporting of suspicious activity. In accordance with OMB Memorandum M-21-31 *Improving the Federal Government's Investigative and Remediation Capabilities Related to Cybersecurity Incidents*, ³²⁸ in FY 2023, EPA will continue to mature the system logging capabilities to meet Event Logging (EL) Level 2 for Intermediate Logging requirements of highest and intermediate criticality and EL Level 3 for Advanced Logging requirements at all criticality levels. Through CSIRC, EPA will continue to maintain relationships with other federal agencies and law enforcement entities, as needed, to support the Agency's mission. The incident response capability includes components such as detection and analysis, forensics, and containment and eradication activities.

In compliance with EO 14028, the Security Operations Center will continue maturation and refinement of the Agency's Incident Response procedures in compliance with Cybersecurity and Infrastructure Security Agency's Playbook for Responding to Cybersecurity Vulnerabilities and Incidents. In compliance with OMB Memorandum M-22-01 *Improving Detection of Cybersecurity Vulnerabilities and Incidents on Federal Government Systems through Endpoint Detection and Response*,³²⁹ the Agency's Security Operations Center will work to integrate End Point Detection and Response capabilities with the Continuous Diagnostics and Mitigation Program to support proactive detection of cybersecurity incidents within EPA's information environment, active cyber hunting, containment and remediation, and incident response. EPA will continue modernizing its network and system logging capabilities (on-premises systems and connections hosted by third parties, such as Cloud Service Providers) for both investigation and remediation purposes.

Additionally, the Agency continues to mature Coordinated Vulnerability Disclosure (CVD), through program expansion and improved notification, response, and reporting activities. By working with internal stakeholders, private industry, and federal organizations to communicate vulnerabilities discovered or encountered, CVD decreases the harm or time an adversary can use to deny or disrupt services to the networks.

EPA leverages capabilities through the Continuous Diagnostics and Mitigation (CDM) Program, which addresses agencies' cybersecurity protection gaps and allows EPA to efficiently identify and respond to federal-wide cybersecurity threats and incidents. In FY 2023, as part of the work with the Department of Homeland Security to support implementation of current and future Phase CDM requirements, the CDM Program will continue closing remaining gaps in privileged access to EPA's network and continue to provide critical security controls for the Agency's cloud applications. The CDM Program also will review interior EPA network boundary protection from interconnections to external networks, expand endpoint detection and response capabilities, and integrate mobile device discovery to expand program capabilities. In FY 2023, EPA estimates a \$13.4 million budget for the CDM Program.

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³²⁸ For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/08/M-21-31-Improving-the-Federal-Governments-Investigative-and-Remediation-Capabilities-Related-to-Cybersecurity-Incidents.pdf.

³²⁹ For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/10/M-22-01.pdf.

Supply Chain Risk Management:

In FY 2023, EPA will continue to develop the Agency's program to implement Cybersecurity Supply Chain Risk Management Controls to comply with the Government Accountability Office (GAO) findings³³⁰ and *NIST 800-53 Rev 5 Security and Privacy Controls for Information Systems and Organization*.³³¹ This work includes coordinating across the Agency with professionals from Information Technology, Information Security, and Procurement to update the policy and obtain the necessary tools to address these critical security requirements, which were a vulnerability in the Log4J FY 2022 intrusion. In compliance with EO 14028, Sec. 4. *Enhancing Software Supply Chain Security*, EPA will implement standards, procedures, and criteria to harden and secure software development environments, and investigate the addition of automated tools to secure the development environment.

Performance Measure Targets:

(PM MFA) Percentage of EPA systems in compliance with multifactor authentication requirements.	FY 2022 Target 75	FY 2023 Target 85
(PM DAR) Percentage of EPA data at rest in compliance with encryption requirements.	FY 2022 Target	FY 2023 Target No Target
(PM DIT) Percentage of EPA data in transit in compliance with encryption requirements.	FY 2022 Target	FY 2023 Target No Target
(PM ZTA) Percentage implementation of an approved "Zero Trust Architecture."	FY 2022 Target	FY 2023 Target No Target Established
(PM ALR) Implementation of advanced event logging requirements (EL3) across EPA networks.	FY 2022 Target EL1	FY 2023 Target EL3

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$106.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$15,348.0 / +4.0 FTE) This program change supports enhancements to protect the Agency's information technology infrastructure and advance the implementation of EO 14028: *Improving the Nation's Cybersecurity*. This investment will increase EPA's

³³⁰ Government Accountability Office Report on information and communications technology (ICT) Supply Chain: GAO-21-164SU.

³³¹ For more information, please see: https://csrc.nist.gov/publications/detail/sp/800-53/rev-5/final.

information technology resiliency and limit vulnerabilities in the event of a malicious attack. This investment includes \$790.0 thousand in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Cybersecurity Act of 2015; Federal Information Security Modernization Act (FISMA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA).

Program Area: IT / Data Management / Security Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$74,013	\$82,715	\$98,452	\$15,737
Science & Technology	\$2,782	\$3,072	\$3,195	\$123
Hazardous Substance Superfund	\$20,984	\$13,826	\$16,904	\$3,078
Total Budget Authority	\$97,779	\$99,613	\$118,551	\$18,938
Total Workyears	467.8	482.4	486.4	4.0

Total workyears in FY 2023 include 172.0 FTE to IT/Data Management working capital fund (WCF) services.

Program Project Description:

The work performed under the Information Technology/Data Management (IT/DM) Program supports human health and the environment by providing critical IT infrastructure and data management. The Program ensures analytical support for interpreting and understanding environmental information; exchange and storage of data, analysis, and computation; rapid, secure, and efficient communication; and access to scientific, regulatory, policy, and guidance information needed by the Agency, regulated community, and the public.

This program supports the maintenance of EPA's IT and Information Management (IT/IM) services that enable citizens, regulated facilities, states, and other entities to interact with EPA electronically to access, analyze and understand, and share environmental data on-demand. The IT/DM Program also provides support to other IT development projects and essential technology to EPA staff, enabling them to conduct their work effectively and efficiently in the context of federal IT requirements, including the Federal Information Technology Acquisition Reform Act (FITARA); Technology Business Management (TBM); Capital Planning and Investment Control; and the Open, Public, Electronic, and Necessary Government Data Act.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support to strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Agency requests an increase of \$4 million to support Future of Work efforts of the Agency, supporting an investment in the latest collaboration and productivity IT tools and software necessary for a modern hybrid workforce and in the IT infrastructure necessary to maintain a permanent increase in telework, remote work, and operational readiness.

Additionally, EPA requests \$6.16 million in FY 2023 to establish a dedicated funding source for the maintenance and modernization of the Agency's enterprise network switch infrastructure

necessary for the operations of the EPA network including data centers. This funding ensures critical infrastructure is replaced when it reaches end of life/end of support. Failure to replace switch infrastructure may result in network degradation, which leaves EPA vulnerable to cybersecurity threats, and can disrupt operations.

The Agency also requests an increase of \$4.7 million and 4 FTE across the EPM and Superfund appropriations to support implementation of the Agencywide Digitization Strategy, which includes the operation of two EPA digitization centers and the development and operation of a modernized records Management Technology, which is necessary to meet the requirements of Memoranda M-19-21 *Transition to Electronic Records* ³³² issued by the Office of Management and Budget and the National Archives and Records Administration. EPA will leverage artificial intelligence and machine learning to assist staff with appropriately scheduling electronic records that are saved to the Record Management Technology. EPA will operate the Paper Asset Tracking Tool and Content Ingestion Services to track paper records as they are submitted and processed through the digitization centers.

EPA also will continue to maintain and manage its core IT/ DM services, including Information Collection Requests, the National Library Network, the Agency's Docket Center, and EPA's Section 508 Program. The Agency also will continue implementing the 21st Century Integrated Digital Experience Act (P.L. 115-336), which includes modernization of public-facing websites and digital services, as well as digitization of paper forms and non-digital services. EPA will finalize a complete inventory of the Agency's paper forms, develop the process to digitize these forms in compliance with the 21st Century Integrated Digital Experience Act, and begin digitizing the forms. EPA's Controlled Unclassified Information Program also will continue work to standardize, simplify, and improve information management and IT practices to facilitate the sharing of important sensitive data within the Agency, with key stakeholders outside of the Agency, and with the public, meeting federal standards as required by Executive Order 13556: Controlled Unclassified Information.³³³

In FY 2023, EPA will further strengthen its IT acquisition and portfolio review process as part of the implementation of FITARA. In the most recent FITARA scorecard, released in December 2021, ³³⁴ EPA scored an overall B+, the third highest rating among Chief Financial Officers Act agencies.

In FY 2023, EPA will continue work on converting prioritized internal administrative paper or analog workflows into modern digital workflows to speed up common administrative tasks, reduce burdensome paperwork for EPA employees and managers, and improve internal data collection and reporting. This work will build on work completed in FY 2022 to identify a set of processes which will yield the greatest benefit for the Agency upon automation and to complete a high priority pilot automation project.

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³³² For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2019/08/M-19-21-new-2.pdf.

³³³ For more information, please refer to Executive Order: https://www.federalregister.gov/documents/2010/11/09/2010-28360/controlled-unclassified-information.

³³⁴ For additional information, please refer to: https://fitara.meritalk.com/.

EPA's Customer Experience (CX) Program will focus on improving the mission support experience of EPA staff to improve their ability to serve the public. The Program focuses on collaborations such as the System Lifecycle Management process, which collects feedback from IT professionals, regions, programs, and other stakeholders to improve the EPA system development process. In FY 2023, the CX Program will collect customer feedback, conduct data analytics, assess priorities within a governing community of practice, and present recommendations to senior leaders to allocate resources to improve CX initiatives.

The Agency's Chief Technology Officer, Chief Architect, and Chief Data Officer will continue to enhance enterprise software development and architecture capabilities, including application development, deployment approaches, and technical platform support. EPA will identify and prioritize the interoperability of data within EPA and across federal agencies that benefits internal and public-facing services. Driven by demand from federal partners, EPA will identify opportunities to share data with other federal partners in the National Secure Data Service. EPA will support data collection in a few priority areas, where required, to improve our efforts to address our learning agenda priority questions, environmental justice, and other agency efforts focused on civil rights and equity challenges.

In FY 2023, the Agency will continue to support the essential capabilities of GeoPlatform, a shared technology enterprise for geospatial information and analysis. By implementing geospatial data, applications, and services such as the Facility Registry System, the Agency can integrate, interpret, and visualize multiple data sets and information sources to support environmental decisions. The Agency will continue developing and increasing capabilities of EPA's Data Management and Analytics Platform, which has both internal and public facing elements such as Envirofacts. EPA will partner with other agencies, states, tribes, and academic institutions to propose innovative ways to use, analyze, and visualize data through EPA's Data Management and Analytics Platform. After completing an alternatives analysis for regulatory data, EPA will begin implementing an enterprise full data life cycle approach for managing regulated facility data.

In FY 2023, the Agency's One EPA Web will continue to manage content and support internal and external users with information on EPA business, support employees with internal information, and provide a clearinghouse for the Agency to communicate initiatives and successes. EPA also will continue to upgrade its web infrastructure, ensuring that it meets current statutory and evolving security requirements.

Registries are shared data services in which common data are managed centrally but shared broadly. They improve data quality in EPA systems, enable integration and interoperability of data across program silos, and facilitate discovery of EPA information publicly and internally. In FY 2023, EPA will increase the use of registries, migrate them to a cloud infrastructure, and improve their quality by modernizing them from custom built solutions to Commercial Off-The-Shelf tools with expanded capabilities.

Performance Measure Targets:

(PM GOPA) Percentage of priority internal administrative processes automated.	FY 2022 Target	FY 2023 Target
		10

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$2,178.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$6,160.0) This change to fixed and other costs is an increase to provide funding for the enterprise network switch infrastructure necessary for the operations of the EPA network including data centers. This funding ensures critical infrastructure is replaced when it reaches end of life/end of support. Failure to replace switch infrastructure may result in network degradation, leave EPA vulnerable to cybersecurity threats, and disrupt EPA operations.
- (+\$3,399.0 / +4.0 FTE) This program change is an increase to support operations of EPA's National Digitization Program and enterprise-wide records management system, which provide for the centralized management and digitization of the Agency's records in an electronic manner. This investment will improve records management, reduce records costs across EPA programmatic offices, and enable EPA to comply with statutory requirements under the Federal Records Act. This investment includes \$712.0 thousand for payroll.
- (+\$4,000.0) This program change is an increase to provide the necessary support for a hybrid modern workforce and will require the integration of facilities and infrastructure, human resources, and information technology programs in order to successfully reenvision the federal work environment.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Federal Information Technology Acquisition Reform Act; Federal Information Security Modernization Act (FISMA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA); Rehabilitation Act of 1973 § 508.

Legal/ Science/ Regulatory/ Economic Review

Administrative Law

Program Area: Legal / Science / Regulatory / Economic Review Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$3,768	\$4,975	\$5,882	\$907
Total Budget Authority	\$3,768	\$4,975	\$5,882	\$907
Total Workyears	19.8	23.8	25.8	2.0

Program Project Description:

This program supports EPA's Administrative Law Judges (ALJs) and the Environmental Appeals Board (EAB).

Administrative Law Judges

The ALJs preside in hearings and issue initial decisions in cases initiated by EPA's enforcement program concerning environmental, civil rights, and government program fraud related violations. Additionally, pursuant to an interagency agreement providing for reimbursement of services, the ALJs also adjudicate enforcement actions brought by National Oceanic and Atmospheric Administration (NOAA), primarily under statutes protecting marine mammals and endangered species over which EPA and NOAA share jurisdiction, such as the Marine Protection, Research, and Sanctuaries Act and Endangered Species Act. The Fifth Amendment of the Constitution of the United States of America guarantees the regulated community the right to due process of the law. The ALJs issue orders and decisions under the authority of the Administrative Procedure Act (APA) and the various environmental, civil rights, and anti-fraud statutes that establish administrative enforcement authority and implement the Constitution's guarantee of due process.

The ALJs preside in hearings in cases initiated at EPA Headquarters and in each of EPA's 10 regional offices. Parties participating before the ALJs include local and national community groups, private parties, and federal, state, and local governments. The ALJs promote public participation in the administrative hearing process through remote hearings and prehearing conferences and maintain an extensive website, accessible to the public, containing all initial decisions and case filings. Additionally, to promote access to justice, participants in cases pending before the ALJs may file documents electronically and are not required to pay a filing fee or be represented by counsel. The ALJs also offer an opportunity for alternative dispute resolution to completely resolve disputed issues or narrow the issues to be decided after a hearing, which may further reduce costs.

The right of affected persons to appeal ALJ initial decisions is conferred by various statutes, regulations, and constitutional due process rights. A small subset of the initial decisions issued by the ALJs are appealed to the Environmental Appeals Board.

Environmental Appeals Board

The Environmental Appeals Board (EAB) is a four-member appellate tribunal established by regulation in 1992 to hear appeals and issue decisions in environmental adjudications (primarily enforcement and permit related) under all major environmental statutes that EPA administers. The EAB promotes the rule of law and furthers the Agency's mission to protect human health and the environment. The EAB furthers the Agency's mission to advance environmental justice and address climate-related issues by ensuring the integrity of federal decision-making and fairness in its adjudication of administrative appeals.

Since the 1994 Executive Order on Environmental Justice was issued, the EAB has played a pioneering role in ensuring that the Agency meets its obligation with respect to environmental justice and, for example, in the context of permitting, has remanded several permit cases where the record did not support a finding that the permit authority reasonably considered the contested environmental justice issues in their permit decision making process.

To promote access to justice, parties appearing before the Board are not required to be represented by counsel or pay a filing fee. Additionally, the Board promotes public participation in the appeals process through remote oral arguments and maintains an extensive website, accessible to the public, containing all final Board decisions and case filings. Among others, parties participating before the Board include local and national community groups, tribal nations, private parties, and state and local governments.

The EAB decides petitions for reimbursement under the Comprehensive Environmental Response, Compensation, and Liability Act Section 106(b); hears appeals of pesticide licensing and cancellation proceedings under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); and serves as the final approving body for proposed settlements of enforcement actions initiated at EPA. The EAB issues decisions in a fair and timely manner consistent with the Administrative Procedure Act (APA) and the applicable environmental statutes, and under the authority delegated by the Administrator and pursuant to regulation, ensuring consistency in the application of legal requirements. In 90 percent of matters decided by the EAB, no further appeal is taken to federal court, providing a final resolution to the dispute. The EAB also offers an opportunity for alternative dispute resolution.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the ALJs will continue to convene formal hearings either remotely or in the location of the alleged violator or violation, as required by statute. In FY 2023, the EAB will continue to efficiently and fairly adjudicate permit and enforcement appeals under all statutes as well as petitions for reimbursement under Comprehensive Environmental Response, Compensation and Liability Act, expediting appeals such as Clean Air Act New Source Review cases and FIFRA licensing proceedings that are particularly time sensitive. The EAB and ALJs also anticipate addressing a potential increase in environmental justice-related issues and in new work assuring

access to justice, including for tribal nations and parties impacted by environmental justice related concerns.³³⁵

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$178.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$729.0 / +2.0 FTE) This program increase advances environmental justice through the Administrative Law Program. This investment includes \$431.0 thousand in payroll.

Statutory Authority:

Administrative Procedure Act (APA); Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Clean Water Act (CWA); Clean Air Act (CAA); Toxic Substance Control Act (TSCA); Solid Waste Disposal Act (SWDA); Resource Conservation and Recovery Act (RCRA); Safe Drinking Water Act (SDWA); Emergency Planning and Community Right-to-Know Act (EPCRA); Marine Protection, Research, and Sanctuaries Act (MPRSA); Mercury-Containing and Rechargeable Battery Management Act (MCRBMA); the Act to Prevent Pollution From Ships (APPS).

³³⁵ For additional information on the Administration's priority on "Tackling the Climate Crisis at Home and Abroad," please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

Alternative Dispute Resolution

Program Area: Legal / Science / Regulatory / Economic Review Goal: Enforce Environmental Laws and Ensure Compliance Objective(s): Hold Environmental Violators and Responsible Parties Accountable

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$533	\$864	\$1,175	\$311
Hazardous Substance Superfund	\$632	\$832	\$868	\$36
Total Budget Authority	\$1,165	\$1,696	\$2,043	\$347
Total Workyears	2.1	5.9	6.9	1.0

Program Project Description:

EPA's Alternative Dispute Resolution (ADR) Program offers cost-effective processes for preventing and resolving conflicts on environmental matters and some workplace conflicts as an alternative to litigation. The Program provides facilitation, mediation, public involvement, training, consensus building advice and support, legal counsel, and organizational development support to external stakeholders and to all EPA programs.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Hold Environmental Violators and Responsible Parties Accountable in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA will continue to provide conflict prevention and ADR services to all EPA programs and external stakeholders on environmental matters. This program also supports implementation of Executive Order (EO) 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government. 336

Specifically, ADR will:

• Continue to administer its five-year, \$53 million Conflict Prevention and Resolution Services contract. The contract supports the ADR Program by providing the above services to more than 100 active projects and is expected to take on an additional 20-30 projects in FY 2023. The Program expects a growth in the areas of environmental justice, climate change, and Title VI civil rights cases.

• Directly provide facilitation, mediation, and training services through the conflict resolution specialists on staff. The ADR Program expects to directly support agency programs and stakeholders by providing facilitation, mediation, or other consensus building support on five to eight projects.

³³⁶ For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.

- Provide training to EPA staff in conflict resolution concepts and skills. The ADR Program
 offers this training through its cadre of eight interactively designed courses to all national
 program offices and regions. Adapting to a virtual environment in FY 2021 has allowed
 the ADR Program to reach many more programs throughout the Agency and expects that
 to increase in FY 2023.
- Help to achieve the goals of President Biden's Justice 40 initiative by tracking the number of CPRC projects in which services are provided to disadvantaged communities.

The following are examples of FY 2021 accomplishments:

- Successfully managed a \$53 million Conflict Prevention and Resolution Services contract and administered 203 contract actions valued at \$35.9 million in the first two years.
- Supported 95 environmental collaboration and conflict resolution cases nationwide, including multiple Administrator priority projects, such as the National Recycling Strategy, the Tijuana River Watershed, and implementation of the Save Our Seas legislation. Additional projects include the National Stakeholder Engagement on Disaster Debris and Community Support for Tribal Asthma.
- Trained more than 479 EPA personnel in conflict resolution skills through 11 courses and supported an additional six conflict resolution trainings for 164 EPA staff and managers.

Performance Measures Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$31.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$280.0 / +1.0 FTE) This program change is an increase for the use of alternative dispute resolution processes, such as mediation and facilitation, to promote equity by including underserved communities in negotiations. This includes \$196.0 thousand in payroll.

Statutory Authority:

Administrative Dispute Resolution Act (ADRA) of 1996; Negotiated Rulemaking Act of 1996; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Civil Rights Program

Program Area: Legal / Science / Regulatory / Economic Review Goal: Take Decisive Action to Advance Environmental Justice and Civil Rights Objective(s): Strengthen Civil Rights Enforcement in Communities with Environmental Justice Concerns

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$8,968	\$9,205	\$25,869	\$16,664
Total Budget Authority	\$8,968	\$9,205	\$25,869	\$16,664
Total Workyears	46.5	54.4	121.9	67.5

Program Project Description:

The Civil Rights Program enforces federal civil rights laws that prohibit discrimination by recipients of federal financial assistance and protect employees and applicants for employment from discrimination. There are two offices within the Agency's Civil Rights Program, the Office of Civil Rights (OCR) and the External Civil Rights Compliance Office (ECRCO). OCR has responsibility for the internal enforcement of several civil rights laws related to equal employment opportunity (EEO), and ECRCO carries out the external enforcement of several civil rights laws that prohibit discrimination in programs or activities that receive federal financial assistance from EPA.

OCR, within EPA's Office of the Administrator, provides leadership, direction, and guidance in carrying out the Agency's EEO Program. OCR is responsible for advising senior leadership and Agency managers in carrying out their EEO responsibilities. OCR also conducts workforce analysis to identify and eliminate barriers to employment and advancement. Additionally, OCR offers counsel to employees, promotes alternative dispute resolution mechanisms to resolve EEO disputes, investigates EEO complaints, and issues EEO decisions. Further, OCR assists managers in processing reasonable accommodation requests made by persons with disabilities or COVID-19 unvaccinated or partially vaccinated employees.

ECRCO, within the Office of General Counsel, investigates and resolves external complaints, develops policy guidance, conducts affirmative compliance reviews, and provides technical assistance to recipients of federal funds and outreach to communities. In FY 2021, ECRCO committed to strengthening civil rights enforcement to address health and environmental disparities, eliminate discriminatory barriers to clean air, water, and land, and ensure the protection of human health and the environment for all persons in the United States. This commitment includes the following: initiating pre-award and post-award proactive civil rights compliance activities, including affirmative compliance reviews; increasing transparency by affirmatively providing information to the public; developing guidance documents to clarify interpretations of requirements and expectations, including about adverse disparate impacts in the permitting context and the consideration of cumulative impacts in disparate impact analysis; partnering with the

Office of Environmental Justice (OEJ) to assist with the integration of environmental justice (EJ) principles in civil rights enforcement and to facilitate EPA responses to EJ issues; enhancing communication and engagement with environmentally overburdened and disadvantaged communities; and strengthening interagency collaboration across the federal government to enforce federal civil rights laws.

In FY 2021, ECRCO launched strategic planning efforts in response to Executive Order (EO) 13985: Advancing Racial Equity and Support for Underserved Communities Through the Federal Government. ECRCO began developing criteria for the initiation of compliance reviews, starting by the first quarter of FY 2022, to address important civil rights issues in at least one environmentally burdened community. ECRCO also began to develop a compliance review planning process for prioritizing annual compliance reviews, beginning in FY 2022. On January 6, 2022, ECRCO issued "External Civil Rights Compliance Office (ECRCO) Process and Criteria for Prioritizing and Selecting Affirmative Compliance Reviews." In addition, ECRCO is developing civil rights guidance for recipients on procedural safeguards to be issued in the near future in FY 2022.

In FY 2021, ECRCO also continued to meet its internal performance measures to ensure the timely resolution of discrimination complaints. ECRCO issued preliminary findings within 180 days of acceptance of the complaint, in two out of two cases, as required by EPA's regulation. In addition, ECRCO continued to implement internal performance measures to ensure that all complaints resolved through Informal Resolution Agreements receive those resolutions in a timely fashion. ECRCO continued an EPA-wide contract to provide language assistance services to customers with limited-English proficiency. In addition, ECRCO continued to improve its process for and support of complaint docket management through investigations, informal resolution agreements, and mediation consistent with EPA's nondiscrimination regulation and its revised Case Resolution Manual, issued in the second quarter of 2021. In addition, ECRCO conducted internal stakeholder engagement and reinvigorated comprehensive training efforts within EPA. On October 27, 2021, ECRCO held its first ever public listening session, which over 200 people attended. In FY 2021, ECRCO also finalized the development of additional tools and internal metrics to evaluate the progress and effectiveness of ECRCO's continued proactive initiatives with Regions 1, 5, and 7 and their respective states to promote states' development of robust nondiscrimination programs.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.3, Strengthen Civil Rights Enforcement in Communities with Environmental Justice Concerns. Work in this program also directly supports progress toward the Agency Priority Goal: Deliver tools and metrics for EPA and its Tribal, state, local, and community partners to advance environmental justice and external civil rights compliance. By September 30, 2023, EPA will develop and implement a cumulative impacts framework, issue guidance on external civil rights compliance, establish at least 10 indicators to assess EPA's performance in eliminating disparities in environmental and public health conditions, and train staff and partners on how to use these resources.

Office of Civil Rights

In FY 2023, OCR will address potential barriers to employment and advancement, enhancing training and service delivery, and assessing organizational EEO efforts during Technical Assistant Visits (TAVs) with the Program and regional offices. Additionally, OCR will actively support, and as required, lead specific efforts to implement the Agency's Diversity, Equity, Inclusion, and Accessibility (DEIA) Strategic Plan as required by Executive Order (EO) 14035. 337

Employee Complaints and Resolution (ECR)

In FY 2023, OCR will dedicate a large portion of its resources to the processing of discrimination complaints, EEO-related training for management and staff, and marketing the benefits of the Alternative Dispute Resolution (ADR) Program. ECR is expected to engage in the following activities:

- Evaluate the effectiveness of the revised procedures for processing Final Agency Decisions.
- Implement strategies for transparently communicating and addressing trends in formal complaints at the Program office and regional office levels.
- Implement ADR training (for management and staff) and issue program manuals and other ADR marketing materials to strengthen participants' knowledge and to increase offers and participation in the ADR process.
- Implement a revised TAV agenda based on feedback from previous TAVs completed to ensure an enhanced customer experience and usefulness.
- Recruit and train new collateral duty EEO Counselors.

Affirmative Employment, Analysis, and Accountability (AEAA)

In FY 2023, AEAA will continue to focus on identifying and eliminating barriers to employment and advancement at the Agency. This will include enhanced data analysis and greater capacity to investigate workforce data triggers. In FY 2023, AEAA expects to engage in the following activities:

- Continue to monitor the effectiveness of measures implemented from the "Barrier Analysis" Report: Increasing the Use of the Schedule A (Disability) Hiring Authority".
- Finalize the "Upward Mobility of Employees into the Senior Grades through the Senior Executive Service (SES) based on the EEO Categories of Race and Sex".
- Begin implementing recommendations resulting from the EPA MD-715³³⁸ priority regarding the collection of applicant flow data for Career Development Opportunities.
- Evaluate the significant underrepresentation of demographics groups from the FY 2022 MD-715 report.

³³⁷ For more information, please see: https://www.federalregister.gov/documents/2021/06/30/2021-14127/diversity-equityinclusion-and-accessibility-in-the-federal-workforce.

338 For more information, please see: https://www.epa.gov/sites/default/files/2021-05/documents/md-

⁷¹⁵ report fy20 final 28 apr 21 signed.pdf.

- Monitor and assist the Administrator's Office and regional and program offices with implementation of EEO Actions Plans.
- Conduct assistance visits for a total of eight regional and program offices.
- Provide effective training and tools for managers to carry out their responsibilities under the MD-715.

Reasonable Accommodations (RA) Program

In FY 2023, the RA Program will work to enhance the effectiveness of services through training, policy development, and improving the support functions of the Local Reasonable Accommodation Coordinators (LORACs). In FY 2023, RA expects to engage in the following activities:

- Evaluate the procedures for providing Personal Assistant Services (PAS) to determine their effectiveness and, as necessary, revise procedures.
- Support the Agency's efforts to improve accessibility for persons with disabilities in response to EO 14035.
- Evaluate the Reasonable Accommodations Management System (RAMS) and upgrade/enhance features as necessary.
- Conduct recertification training (every three years) for the LORACs.
- Conduct assistance visits for a total of eight EPA regional and program offices.

External Civil Rights Compliance Office, Including Title VI

In FY 2023, EPA requests an additional \$11.6 million and 50.0 FTE to enforce the Nation's civil rights laws through ECRCO and the regional offices who provide support and assistance to investigate and resolve critical civil rights complaints and initiative affirmative compliance reviews. Only through a whole of EPA approach to external civil rights compliance can we achieve measurable environmental, public health, and quality of life improvements in the most overburdened, vulnerable, and underserved communities.

EPA will continue to overhaul and refocus the office to bring justice to frontline communities that experience the worst impacts of environmental pollution. EPA's FY 2022-2026 Strategic Plan provides the framework for the Agency to center its mission on the integration of justice, equity, and civil rights across the Nation's environmental protection enterprise. ECRCO and the OEJ will work closely to promote the integration of EJ and civil rights throughout EPA and carry out the objectives, sub-objectives, and annual and long-term goals articulated in Strategic Plan Goal 2: "Take Decisive Action to Advance Environmental Justice and External Civil Rights." In addition, to drive short term action by the end of FY 2023, EPA also established an Agency Priority Goal in its strategic plan to "Deliver tools and metrics for EPA and its tribal, state, local, and community partners to advance environmental justice and external civil rights compliance."

ECRCO will shift from being primarily reactive, responding only to complaints, to being proactive in initiating compliance activities. ECRCO will fully implement its authority to address actions, policies, and practices by recipients of EPA funding that have a discriminatory impact on overburdened and disadvantaged communities. Beginning in FY 2022 and in FY 2023, ECRCO

will continue to: initiate proactive pre-award and post-award civil rights compliance activities, including affirmative compliance reviews to address the impacts of potentially discriminatory activities on overburdened communities; develop and implement clear and strong civil rights guidance and corresponding training and technical assistance to increase recipients' compliance with civil rights laws, including on adverse disparate impacts, including in the permitting context; conduct timely and effective civil rights complaint investigations and resolutions – including investigations and informal resolution agreements that effectively address adverse disparate impacts; enhance communication and engagement with environmentally overburdened communities to meaningfully inform EPA's civil rights work and to empower and increase their participation in critical decision making; increase transparency by affirmatively providing information to the public; and strengthen federal interagency collaboration and coordination on complaints, compliance reviews, and policy guidance to enforce federal civil rights laws.

In addition, as civil rights vigilance is an Agencywide responsibility, ECRCO will work with OEJ and all EPA regional and program offices to: engage all EPA program and regional offices in civil rights compliance activities to identify whether recipient programs and activities are consistent with civil rights laws; communicate requirements and expectations to EPA staff through education, training, outreach, and technical assistance to enhance civil rights enforcement awareness and strengthen intra-agency collaboration; and include applicable civil rights requirements in EPA non-civil rights guidance, program strategic planning, environmental policy directives, rulemakings, enforcement, and siting and permitting decisions by EPA recipients.

In FY 2023, ECRCO will continue to ensure timely resolution of discrimination complaints and affirmative compliance reviews and implement Informal Resolution Agreements within the agreed-upon timeframes. Also, in FY 2023, ECRCO will continue to implement and refine the Case Resolution Manual that was reissued in FY 2021 and updated in FY 2022.

Specific ECRCO FY 2023 activities include:

- Continue to initiate affirmative civil rights compliance activities, including targeted postaward compliance reviews in environmentally overburdened and disadvantaged communities, and conduct pre-award applicant reviews that include greater accountability for applicants and recipients to ensure civil rights compliance.
- Fully implement the guidance to clarify investigative and legal standards that are applied to external civil rights claims, including how cumulative impacts will be evaluated when assessing whether an action, policy or practice, such as in the permitting context, has an unjustified disparate and adverse impact.
- Fully implement the civil rights procedural guidance for recipients.
- Fully implement the process (to be revised in FY 2022) for reviewing Form 4700-4, the "Preaward Compliance Review Report for All Applicants and Recipients Requesting EPA Financial Assistance." These revisions will aid in ensuring compliance with baseline foundational procedural requirements that all applicants and recipients of federal funds must meet to bring all applicants and recipients into compliance, address noncompliance through voluntary means whenever possible, and take appropriate action when voluntary means are not possible.
- Continue to conduct post-award audits of submitted Form 4700-4 forms.

- Complete the Technical Assistance Video planned to be posted publicly in FY 2022, to inform recipients of their nondiscrimination program obligations.
- Continue to increase transparency by proactively providing the public with access to ECRCO case information.
- Increase coordination, communication, and engagement with environmentally overburdened and disadvantaged communities.
- Continue to enhance ADR services, including increasing ECRCO's capacity to offer services to a greater number of recipients and communities.
- Continue to strengthen interagency collaboration across the federal government to enforce federal civil rights laws.
- Develop programmatic guidance in FY 2023 to clarify that recipients must not only collect and maintain data about the composition of the communities they serve, but also evaluate and use those data to determine whether significant decisions, including permitting decisions, comply with civil rights laws.
- Develop and finalize EPA Directive/Order: Section 504 Procedures for Ensuring Meaningful Access for Persons with Disabilities to EPA Programs Services and Activities, including an EPA-Wide Disability Services Contract to ensure a clear, consistent, and well-coordinated process for ensuring meaningful access for persons with disabilities.
- Implement the "External Disability Complaint Process" that the public can use to file complaints against EPA alleging lack of meaningful access for persons with disabilities to EPA programs and activities.
- Create a Resources Page on the ECRCO website and populate with existing and new resources.
- Ensure broad dissemination of critical civil rights deliverables through partnerships with outside state, local and tribal councils, and alliances.

Performance Measure Targets:

(PM EJCR05) Percentage of state-issued permits reviewed by EPA that	FY 2022	FY 2023
include terms and conditions that are responsive to environmental justice	Target	Target
concerns and comply with civil rights obligations.		TBD
(PM EJCR06) Percentage of elements completed by state recipients of EPA	FY 2022	FY 2023
financial assistance toward having foundational civil rights programs in	Target	Target
place.	20	40
(PM EJCR12) Percentage of EPA programs and regions that have	FY 2022	FY 2023
identified and implemented opportunities to integrate environmental justice	Target	Target
considerations and strengthen civil rights compliance in their planning,	1.5	20
guidance, policy directives, monitoring, and review activities.	15	30
(PM EJCR13) Percentage of EPA regions and national programs that have	FY 2022	FY 2023
established clear implementation plans for Goal 2 commitments relative to	Target	Target
their policies, programs, and activities and made such available to external		100
partners.		100
		•
(PM EJCR14) Percentage of EPA programs and regions that have	FY 2022	FY 2023
implemented program and region-specific language assistance plans.	Target	Target
	30	60

(PM EJCR15) Percentage of EPA programs and regions that have implemented program and region-specific disability access plans.	FY 2022 Target	FY 2023 Target
		60
	T	1
(PM EJCR16) Number of proactive post-award civil rights compliance	FY 2022	FY 2023
reviews initiated to address discrimination issues in environmentally	Target	Target
overburdened and underserved communities.	3	6
(PM EJCR17) Number of audits completed to ensure EPA financial	FY 2022	FY 2023
assistance recipients are complying with federal civil rights laws.	Target	Target
	25	75
(PM EJCR18) Number of information sharing sessions and outreach and	FY 2022	FY 2023
technical assistance events held with overburdened and underserved	Target	Target
communities and environmental justice advocacy groups on civil rights and environmental justice issues.	8	12

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$83.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$15,781.0 / +67.5 FTE) This program change is an increase in order to increase staffing and capacity in the External Civil Rights Compliance Office, to enforce the Nation's civil rights laws and to work toward the goal of achieving measurable environmental, public health, and quality of life improvements in the most overburdened, vulnerable, and underserved communities. This investment will support activities including investigations into claims of discrimination in communities and pre-award and post-award compliance activities. This investment includes \$12.329 million in payroll.

Statutory Authority:

Title VI of the Civil Rights Act of 1964; Title IX of the Educational Amendments of 1972; Rehabilitation Act of 1973 § 504; the Age Discrimination Act of 1975, and Federal Water Pollution Control Act Amendments of 1972 § 13; Title VII of the Civil Rights Act of 1964; Equal Pay Act of 1963; Rehabilitation Act of 1973 §§ 501, 504, 505, 508; Americans with Disabilities Act of 1990; ADA Amendments Act of 2008; Age Discrimination in Employment Act (ADEA) of 1967; and Genetic Information Nondiscrimination Act (GINA).

Integrated Environmental Strategies

Program Area: Legal / Science / Regulatory / Economic Review Goal: Tackle the Climate Crisis

Objective(s): Accelerate Resilience and Adaptation to Climate Change Impacts

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$9,614	\$9,475	\$40,912	\$31,437
Total Budget Authority	\$9,614	\$9,475	\$40,912	\$31,437
Total Workyears	46.4	48.5	76.5	28.0

Program Project Description:

The Integrated Environmental Strategies (IES) Program advances the Agency's mission of protecting human health and the environment by focusing on cross-media environmental concerns. The IES Program provides tools, training, advice, and resources to help EPA work as a more effective organization. Nationally, IES is focused on: 1) supporting streamlining automation, oversight, and integration of EJ and climate in environmental permitting; 2) working with industrial sectors to identify and develop sensible approaches to better protect the environment and public health; 3) collaborating with partners, including federal, state, municipalities, communities, businesses, and other stakeholders, to implement locally-led, community-driven approaches to environmental protection through technical assistance, policy analysis, and training; and 4) partnering with other federal agencies, states, territories, tribes, local governments, businesses, and others to increase the resilience of the Nation to the impacts of climate change.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Accelerate Resilience and Adaptation to Climate Change Impacts in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA requests an investment of \$31.4 million and 28.0 FTE for the IES Program. The Program will focus on four major areas, each presenting unique opportunities to improve delivery of environmental protection across multiple media and stakeholders. These four areas include permitting strategies, sector strategies, climate adaptation and resilience, and community-driven environmental protection.

Permitting Strategies

One way that EPA implements its statutory authority is through various permitting programs. In FY 2023, the Agency will continue to focus on working across EPA program and regional offices and with state and tribal co-regulators to support coordination, streamlining, oversight, automation, and the integration of environmental justice (EJ) and climate change for environmental permitting.

EPA will work to transition EPA's major permitting programs from paper processes to electronic processes through the automation of permit application, review, and issuance processes. Expected benefits include reduced processing time on issuing permits, decreased time between receiving monitoring data and engaging in enforcement actions, and increased transparency by allowing communities to search, track, and access permitting actions easily. Permit automation will better enable the integration of climate change and EJ considerations into permit processes and ensure that they are addressed within the terms and conditions of the permit. For the regulated community, permit automation will allow for a simplified, streamlined, and transparent permitting process, which will result in both time and cost savings.

With a renewed focus on more effective integration of EJ and climate change considerations within the Agency's several decentralized permitting programs, EPA will continue to play a leading role coordinating efforts aligned with the Administration's priorities. In FY 2023, EPA will ensure continued oversight, coordination, and support of the goals of both established authorities and new priorities that include:

- 1) Working directly with EPA's regional permitting programs to coordinate permit support for major infrastructure projects, including carbon capture/use/sequestration and renewable energy projects requiring a permit.
- 2) Supporting EPA's permitting programs to integrate EJ and climate change analysis into permit development by establishing policy, guidance, and tools for consistency and building permit writers' proficiencies in EJ and climate resilience/adaptation/mitigation.
- 3) Supporting EPA oversight, permit quality, permit timelines, and permit program integrity of delegated state/local permitting programs.
- 4) Ensuring the documentation of best practices and addressing cross-cutting permitting and policy issues (*e.g.*, Endangered Species Act and National Historic Preservation Act coordination); and, in partnership with other federal agencies, state and tribal permitting offices, continuing to streamline and gain efficiencies in the review of all permits.
- 5) Leading the expansion of a successfully piloted e-permitting application tool to other permitting program areas. The Program's vision entails working across the entire Agency on the development and implementation of an electronic permit platform for reviewing, preparing, processing, and issuing permits as well as monitoring compliance.

Smart Sectors

EPA's Smart Sectors Program (SSP) provides a platform for the Agency to collaborate with industry to develop innovative approaches to protect the environment and public health from a multi-media perspective. SSP serves as a hub for understanding and addressing sector specific environmental challenges and opportunities, facilitating dialogue with industry representatives and other stakeholders, and managing a network of SSPs in all 10 EPA regions. The Program will continue serving a liaison function to connect, convene, and facilitate discussions among agency experts and business leaders to address discrete issues unique to each sector and help that sector drive improvements that serve the Agency's greater mission of protecting human health and the environment.

In FY 2023, SSP will focus activities in three areas: broad multi-stakeholder engagement, cross-agency coordination, and policy and program initiatives as they relate to industry sectors. Multi-stakeholder engagements will provide a platform for working with industry trade associations and leading companies, as well as other stakeholders on key issues such as climate change, EJ, and infrastructure. These other stakeholders include non-governmental organizations, organized labor, the academic community, state/local governments, and overburdened and vulnerable communities with EJ concerns, as appropriate. The Program will coordinate and/or lead crossagency, sector-based projects and activities to address the Administration's priorities, including tackling climate change, delivering EJ, and securing environmentally responsible and resilient supply chains.

Community-Driven Environmental Protection

The IES Program delivers technical assistance, training, and tools to economically distressed communities and coordinates the Agency's work with communities to increase efficiency, effectiveness, and accountability. In FY 2021, the Program delivered direct technical assistance to more than 35 communities. In FY 2022, the Program is developing new technical assistance approaches specifically focused on helping communities disproportionately impacted by the COVID-related economic downturn, attracting private investment, growing in more resilient ways, and rebuilding in a way that also improves environmental and human health outcomes. In FY 2023, EPA will deploy the tools, expertise, and technical assistance, that were piloted and deployed in FY 2022. These resources will continue to strengthen EPA's efforts to leverage public and private sector investments in support of improved economic development and environmental outcomes.

In FY 2023, the Program will continue to lead, along with the new Office of Environmental Justice, the application of community-driven solutions to local environmental challenges, focusing on the Administration's priorities, such as leveraging private investment and aligning federal investments to maximize benefits to vulnerable and underserved communities. Technical assistance and training are the cornerstones of EPA's cooperative approach to addressing environmental challenges in communities, particularly communities that are economically distressed. In FY 2023, the Program will continue to prioritize technical assistance, capacity building and training, with the objective of helping communities as well as tribal, state, and local governments increase their capacity to protect the environment while growing their economies, creating jobs, using public and private sector investments and other resources more efficiently, and promoting more equitable approaches to development. Where appropriate, EPA will partner with other agencies to help achieve locally led, community-driven approaches to protecting air, land, and water, while at the same time supporting equitable economic revitalization.

In FY 2023, the Program will continue analyses on emerging trends, innovative practices, and tools that support equity, climate resilience, Greenhouse Gas (GHG) reduction, and clean air, land, and water outcomes. EPA will continue to develop tools to help interested communities incorporate innovative, equitable approaches to infrastructure and land development policies. This assistance helps deliver on multiple economic, community, and human health goals embedded in EPA's core mission, including managing stormwater, improving local air and water quality, cleaning up and reusing previously developed sites, and supporting revitalization and

redevelopment in economically distressed communities to create economic opportunities while reducing GHG emissions and protecting the environment.

Climate Adaptation Program

EPA is committed to identifying and responding to the challenges that a changing climate pose to human health and the environment. The goal of the Climate Adaptation Program is to ensure the Agency continues to fulfill its mission of protecting human health and the environment even as the climate changes and disruptive impacts increase.

In FY 2023, the Program will focus on integrating climate adaptation into EPA's programs and regions, policies, rules, financial mechanisms, and operations to ensure they are effective even as the climate changes, while the Agency also works to reduce GHG emissions. The Program will guide implementation of the 2021 EPA Climate Adaptation Action Plan, including advising and monitoring progress made by EPA National Program Offices and Regional Offices in integrating climate adaptation into their work. The Program will report on progress made using performance measures and targets identified in program and regional office Implementation Plans. Managers and staff at EPA will be trained on how to integrate climate adaptation into their work.

In FY 2023, the Program will develop decision-support tools and technical assistance to improve the effectiveness of decisions sensitive to climate change and related EJ considerations. These tools will empower EPA staff and their partners to consider climate, as well as changes in social and economic conditions that are influenced by climate change, and to identify strategies that will yield co-benefits. Such co-benefits include reductions in GHGs and other pollutants, improved public health, economic growth and job creation benefits, and national security and EJ benefits that will be central to building a more resilient future.

In FY 2023, the Program will strengthen the adaptive capacity of states, tribes, territories, local governments, EJ organizations, community groups, and businesses, with a particular focus on advancing EJ, by increasing the number EPA has assisted, through grants or technical assistance to 1) develop or update their climate resilience/adaptation plans, and/or 2) implement an action to anticipate, prepare for, and adapt to climate change. Particular attention will be given to ensuring that the outcomes of investments made with funds from the Infrastructure Investment and Job Act will be resilient to the impacts of climate change, as well as support climate mitigation goals. The Agency's partners share responsibility for protecting human health and the environment, and partnerships with EPA are at the heart of the Nation's environmental-protection system.

The desire is to empower communities and tribes across the Nation to manage the risks of climate change as we strive to attain the Agency's mission. The Program will produce and deliver training, tools, technical assistance, financial incentives, and information, so our partners can adapt to and increase resilience to climate change. The Program also will support federally recognized tribes in incorporating climate adaptation into at least one program supported by an EPA grant.

Lastly, EPA will provide financial incentives through grant programs to support climate-resilient investments in communities across the Nation. Certain parts of the population, such as communities of color, low-income communities, children, the elderly, tribes and indigenous

people, and small rural communities, can be especially vulnerable to the impacts of climate change. To that end, the Program will engage the most overburdened and vulnerable communities to improve their capacity to anticipate, prepare for, and adapt to or recover from climate change impacts.

Performance Measure Targets:

(PM AD07) Number of priority actions completed in EPA's Climate	FY 2022	FY 2023
Adaptation Action Plan and Program and Regional Implementation Plans.	Target	Target
	100	100
	•	
(PM AD08) Number of EPA national program offices that have developed	FY 2022	FY 2023
adaptation training for programs and staff.	Target	Target
	4	10
(PM AD09) Cumulative number of federally recognized tribes assisted by	FY 2022	FY 2023
EPA to take action to anticipate, prepare for, adapt to, or recover from the	Target	Target
impacts of climate change.	100	150
(PM AD10) Cumulative number of states, territories, local governments,	FY 2022	FY 2023
and communities (i.e., EPA partners) assisted by EPA to take action to	Target	Target
anticipate, prepare for, adapt to, or recover from the impacts of climate	250	300
change.	230	300
(PM AD11) Number of tribal, state, regional, and/or territorial versions of	FY 2022	FY 2023
the Climate Change Adaptation Resource Center (ARC-X) or similar	Target	Target
systems developed by universities with EPA support.	3	6
(PM AD12) Hours of appropriate subject matter expert time provided by	FY 2022	FY 2023
EPA to help communities adapt to climate impacts, build long-term	Target	Target
resilience, and support the most underserved and vulnerable communities	No Target	No Target
after federally declared disasters.	Established	Established
(PM PAT) Percentage of EPA permitting processes automated.	FY 2022	FY 2023
	Target	Target
		10
		1
(PM CO1) Percentage of technical assistance projects in support of	FY 2022	FY 2023
environmentally sustainable and community-driven revitalization that	Target	Target
support or expand upon previous or ongoing federal investments.		TBD

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$289.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,888.0 / +6.0 FTE) This program change is an increase to support the coordination, streamlining, oversight, automation, and integration of EJ and climate change into environmental permitting. This investment includes \$1.1 million in payroll.

- (+\$19,985.0 / +12.0 FTE) This program change is an increase provided for Climate Adaptation to strengthen the adaptive capacity of states, tribes, territories, local governments, communities, and businesses. This investment includes \$2.18 million in payroll.
- (+\$8,275.0 / +10.0 FTE) This program change is an increase to support core program capacity that is central to the Agency's mission. These resources will build the program by addressing the Administration's priorities, adhering to the goals of the *FY 2022 2026 EPA Strategic Plan*, with attention to the urgency of climate change. This investment includes \$1.8 million in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); National Environmental Policy Act; CAA § 309; Endangered Species Act; National Historic Preservation Act; Archaeological and Historic Preservation Act; Fishery Conservation and Management Act; Fish and Wildlife Coordination Act; and Title 41 of the Fixing America's Surface Transportation Act.

Legal Advice: Environmental Program

Program Area: Legal / Science / Regulatory / Economic Review Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$55,700	\$49,595	\$76,855	\$27,260
Hazardous Substance Superfund	\$1,161	\$443	\$461	\$18
Total Budget Authority	\$56,862	\$50,038	\$77,316	\$27,278
Total Workyears	257.6	263.9	316.5	52.6

Total workyears in FY 2023 include 8.8 FTE funded by TSCA fees and 17.1 FTE to support Legal Advice working capital fund (WCF) services.

Program Project Description:

The Legal Advice: Environmental Program provides legal representational services, legal counseling, and legal support for all the Agency's environmental activities. The legal support provided by this program is essential to the Agency's core mission. The personnel assigned to this program represent essential expertise in the critical fields that EPA relies on for all decisions and activities in furtherance of its mission: to protect human health and the environment.

The Program provides legal counsel on every major action the Agency takes. It plays a central role in all statutory and regulatory interpretation of new and existing rules, as well as rule and guidance development under EPA's environmental authorities. The Program also provides essential legal advice for every petition response, judicial response, and emergency response. When the Agency acts to protect the public from pollutants or health-threatening chemicals in the air we breathe, in the water we drink, or in the food we eat, the Program provides counsel on the Agency's authority to take that action. The Program then provides the advice and support necessary to finalize and implement that action. When that action is challenged in court, the Program defends it, in coordination with the Department of Justice (DOJ). The Program also supports EPA's National Freedom of Information Act (FOIA) Office, as part of the legal services activity within the Agency's Working Capital Fund.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Agency requests an investment of 52.6 FTE and \$27.3 million to strengthen and assist EPA's environmental programs in tackling the climate crisis; advancing environmental justice; responding to coal combustion residuals (CCR) actions and rulemakings and emerging issues like per- and polyfluoroalkyl substances (PFAS); supporting Toxic Substances and Control Act (TSCA) implementation; and enhancing transparency. During the past several years EPA's Office of General Counsel's (OGC) workload continues to significantly outpace staffing resources

The Program also will work on vital new Administration priorities including regulatory changes, climate, and environmental justice and will continue to provide legal representation in judicial and administrative litigation. The Program also will provide counseling outside of the litigation context in the highest priority issues arising under all the environmental statutes administered by EPA.

In FY 2023, the Agency will continue to focus on its core mission to apply the most effective approaches by implementing EPA's environmental programs under the Comprehensive Environmental Response, Compensation & Liability Act, Resource Conservation and Recovery Act, Clean Air Act, Clean Water Act, Toxic Substances and Control Act, Federal Insecticide Fungicide and Rodenticide Act, Food Quality Protection Act, Safe Drinking Water Act, and other authorities. This strategy will help ensure that human health and the environment are protected, including clean air, water, and land, and safe chemicals and pesticides.

EPA also will continue to strengthen its implementation of FOIA to enhance transparency, build public trust in Agency actions, and support public participation by working to achieve the *FY 2022-2026 EPA Strategic Plan* long-term performance goal to eliminate the backlog of overdue FOIA responses.

Finally, the Program includes the OGC Ethics Program which bolsters all of the principles articulated in the *FY 2022-2026 EPA Strategic Plan*. Public trust in the integrity of EPA's scientific and legal efforts necessarily depends upon all EPA employees faithfully carrying out their official duties ethically and impartially.

Legal counseling resources continue to be in high demand to support the Agency's response to states seeking assistance developing or implementing environmental programs, industrial facilities seeking permits to allow them to undertake new economic activity or continue existing activity, and citizens seeking actions to protect local environmental quality, among other things. The Program will prioritize resources after supporting judicial and administrative litigation to counsel agency clients on these matters.

The following are examples of recent accomplishments and work being completed to illustrate this program's role in implementing the Agency's core mission:

EPA's Water Law Office (WLO) has provided critical legal support for implementing Executive Order 13990, Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis³³⁹ (86 Fed. Reg. 7037 January 25, 2021-EO 13990), under which EPA and the Army Corps of Engineers reviewed, reconsidered, and decided to undertake rulemaking to replace the previous Administration's definition of "waters of the United States" under the Clean Water Act. WLO expects to continue its work on legal issues associated with this agency priority in FY 2023, including supporting the Solicitor General's Office in addressing the Sackett petition in the Supreme Court. Additionally, WLO also has provided critical legal support for the decision to reconsider and revise the Agency's 2020 rule implementing CWA section 401.

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³³⁹ For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/.

- EPA's Pesticides and Toxic Substances Law Office (PTSLO) continues to provide critical legal advice in support of EPA's implementation of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, which modernized and substantially overhauled the TSCA. PTSLO also provides substantial support to the Office of Pesticide Programs in its activities related to the operation of a national licensing program for pesticides sold and used in the United States, which involves the issuance of hundreds of reviewable final agency actions each year, including the grant of new pesticide registrations; amendments to existing pesticide registrations; new or amended tolerance regulations authorizing the presence of specific levels of pesticide residues on food sold in the United States; determinations related to the statutorily-mandated review of all existing pesticide registrations; state special local needs registrations; and emergency exemptions from the requirements of the pesticide statute.
- EPA's Air and Radiation Law Office (ARLO) has played a key role in implementing the American Innovation and Manufacturing (AIM) Act. ARLO attorneys played a critical role in helping EPA propose and finalize its first set of regulations implementing the AIM Act, which Congress passed in December of 2020. This law requires the phase down of Hydrofluorocarbons (HFCs), a potent class of greenhouse gases. ARLO also has played a key role in developing a rulemaking to regulate emissions from the oil & natural gas industry under Clean Air Act section 111, which requires EPA to regulate emissions from source categories that endanger public health or welfare as well as defending EPA's authority to effectively regulate greenhouse gas emissions from the power sector under Clean Air Act section 111. Additionally, ARLO played a key role in a number of recent actions to reduce greenhouse gas emissions from vehicles and will work closely with the Department of Justice to defend the recent light duty vehicle and aircraft greenhouse gas actions.
- EPA's Solid Waste and Emergency Response Law Office (SWERLO) provided critical legal advice on multiple EPA actions to protect communities and hold facilities accountable for controlling and cleaning up the contamination created by decades of coal ash disposal, which can pollute waterways, groundwater, drinking water, and the air. The actions advance the Agency's commitment to protecting groundwater from coal ash contamination and include: 1) proposing decisions on requests for extensions to the current deadline for initiating closure of unlined Coal Combustion Residuals (CCR) surface impoundments; 2) putting several facilities on notice regarding their obligations to comply with CCR regulations; and 3) laying out plans for future regulatory actions to ensure coal ash impoundments meet strong environmental and safety standards. SWERLO served as the Agency lead in D.C. Circuit litigation, including a challenge to the CCR Part A rule and a separate challenge to the approval of the Oklahoma CCR state program. SWERLO provided a significant amount of critical legal advice on a top Administration priority of addressing PFAS contamination. Additionally, SWERLO represented EPA's interests in the development of the U.S. litigating position in defensive litigation related to PFAS contamination at military bases.
- EPA's Cross-Cutting Issues Law Office (CCILO) is providing specialized legal and tactical expertise in legal counseling on a range of administrative law matters related to

implementing the President's agenda, including reviewing, revising, and rescinding rules and guidance issued under the prior Administration. CCILO also has provided critical legal support to advance the Administration's Environmental Justice goal. CCILO provided critical legal support to the Council on Environmental Quality (CEQ) to set up the White House Environmental Justice Advisory Counsel, and counsel on paperwork reduction issues to allow CEQ to adopt EPA's Paperwork Reduction Act for the Climate and Environmental Justice Screening Tool. CCILO also led the offer to update EJ Legal Tools to incorporate new and revised environmental and civil rights statutes to advance environmental justice. Finally, CCILO continues to support the Administration's Memorandum on Tribal engagement in a variety of contexts, including in the context of addressing the inequity to Oklahoma tribes created by the SAFETEA decision.

- EPA's National Freedom of Information Office (NFO) provided legal advice and support to the agencywide FOIA Program by reducing more than 24 percent of EPA's backlog of overdue FOIA responses during FY 2021, down to 1,056 from 1,395 at the start of the fiscal year; undertook the initial review, and assignment of 6,531 FOIA requests; processed 253 applications for expedited response; and processed 974 applications for fee waivers. NFO also processed and closed more than 1,756 FOIA requests and issued new agencywide FOIA Policy and FOIA Procedures.
- The Ethics Office is solely responsible for assigning, reviewing, and certifying public financial disclosure reports and periodic transaction reports. These reports are due in quarter 3 of the fiscal year, and the OGC Ethics Program received more than 730 reports. Of these, 98 percent were reviewed on time and 96 percent were certified on time. EPA's Ethics Program remains committed to the continuous improvement of accountability in its programs and employee compliance with ethics laws and regulations.

Performance Measure Targets:

(PM FO2) Number of FOIA responses in backlog.	FY 2022	FY 2023
	Target	Target
	845	634

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$9,431.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$14,098.0 / +37.6 FTE) This program change addresses a need for increased defensive litigation work in multiple environmental statutes, legal work in pesticides and toxics, and legal support for emerging issues like PFAS. This investment provides additional funding for essential core workforce support costs and includes \$8.726 million in payroll. These additional resources also will assist EPA in tackling the climate crisis and securing environmental justice.

- (+\$3,485.0 / +14.0 FTE) This program change is an increase for legal counseling and support for CCR actions and rulemakings. This investment includes \$3.249 million in payroll.
- (+\$246.0 / +1.0 FTE) This program change is an increase for legal support for TSCA implementation. This investment includes \$232.0 thousand in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Legal Advice: Support Program

Program Area: Legal / Science / Regulatory / Economic Review Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$16,645	\$15,865	\$18,892	\$3,027
Total Budget Authority	\$16,645	\$15,865	\$18,892	\$3,027
Total Workyears	80.2	89.2	89.2	0.0

Total workyears in FY 2023 include 5.6 FTE funded by TSCA fees.

Program Project Description:

The Legal Advice: Support Program provides legal representational services, legal counseling, and legal support for all activities necessary for EPA's operations. The Program provides legal counsel and support on a wide variety of issues and plays an important role in meeting and addressing legal support for work under the Civil Rights Statutes, contracts, grants, employment law, and Freedom of Information Act (FOIA) requirements. It provides critical counseling on a range of Information Law, Employment and Labor Law, Intellectual Property Law, Appropriations and National Security Law matters. With enhanced FOIA implementation, community consultations and other public participation opportunities, the beneficiaries of environmental protection – the American people including environmental justice (EJ) communities – will be able to engage more meaningfully through their communities, local governments, and state and tribal governments.

For example, if an EPA program office needs guidance on the legal parameters around giving grants, how to respond to a FOIA request, whether it may spend money on a certain activity, or what to do when a tort claim is filed with the Agency, this program provides answers, options, and legal advice. Additionally, the Program provides comprehensive advice on civil rights issues including equal protection. The Program provides counsel and advice for settlement on Equal Employment Opportunity mediations and counsels on a range of sensitive and complex national security law matters. The Program also supports EPA in maintaining high professional standards and in complying with all laws and policies that govern the Agency's operations.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Agency requests an investment of \$3.0 million to strengthen EPA's Legal Advice: Support Program. In FY 2023, EPA will continue to address and manage information requests, legal support for work under the Civil Rights Statutes, and employment law. There also is an ongoing need for a high level of involvement in questions related to contracts, ethics, grants, finance, appropriations, and employment.

The resources in this program are critical to maintain basic legal services for EPA. During the past several years, the Legal Advice: Support Program workload has outpaced staffing resources. Defending lawsuits on matters ranging from FOIA to torts to contracts to employment law is vital to ensure the Agency continues to be responsive to the public. The Agency's focus on responding to our significant FOIA workload and increasing our responsiveness to requesters has correspondingly increased the work of the FOIA attorneys. EPA's Federal Tort Claim Act portfolio also has increased with incredibly complex, billion-dollar cases such as Flint and Gold King Mine, which require significant resources. Further, the Civil Rights lawyers have a critical role to play in "Affirmatively advancing equity, civil rights, racial justice, and equal opportunity", pursuant to Executive Order 13985 (January 21, 2021). 340

The following are examples of FY 2021 accomplishments:

- Provided ongoing agencywide legal support to address questions regarding the use of appropriated funds in unusual remote work environments due to the COVID-19 global pandemic, including the use of appropriated funds for vaccines and associated travel issues. Provided critical employment law advice and assistance in navigating a series of COVID related issues. This legal support also included providing extensive counsel to the Office of Grants and Debarment in updating guidance to agency programs in providing administrative relief to financial assistance recipients impacted by the COVID-19 response. The Office of Grants and Debarment (OGD) guidance was in furtherance of governmentwide administrative relief authorized by OMB and more specific EPA programmatic relief extended to recipients on a case-by-case basis. The Agency's primary guidance took the form of internal and external FAQs in addition to consultation to respond to specific questions raised by recipients across the country.
- Provided critical legal counsel and assistance to the Water Infrastructure Finance and Innovation Act of 2014 (WIFIA) Program by providing legal sufficiency review and concurrence for all loans in the WIFIA Program.
- Engaged in extensive and significant technical legislative drafting assistance for the Infrastructure Investment and Jobs Act (IIJA) (Public Law 117-58). The proposed legislation includes approximately \$60 billion in proposed infrastructure funding for EPA projects across the Nation. Technical legislative drafting assistance and legal counseling on the scope of activities authorized in final legislation also was provided in support of the American Rescue Plan Act of 2021³⁴¹ which included \$100 million in grant funding for the Office of Air and Radiation and the Office of Environmental Justice to implement assistance programs; Urban Waters; and EJ-related Clean Air Act authorities.
- Created and beta tested training on how to promote diversity and comply with the Equal Protection Clause in support of E.O. 13985. Beta testing is continuing into fiscal year 2022.

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³⁴⁰ For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.

³⁴¹ For additional information, please refer to: https://www.congress.gov/117/bills/hr1319/BILLS-117hr1319enr.pdf.

- Engaged with EPA program offices' efforts to advance Diversity, Equity, Inclusion and Accessibility (DEIA), as well as EJ by providing legal counsel, including risks assessments and the identification of pragmatic solutions, designed to position these efforts to have longevity. Also created and deployed multiple due process training sessions to explain the legal framework and how operating within this legal terrain will make all DEIA and EJ efforts sustainable. This diverse and varied work will continue into FY 2023.
- Provided essential counseling on employment and labor law matters associated with the Administration's transition; other employment law matters, including Equal Employment Opportunity mediations; a range of sensitive and complex national security law matters; and key confidential business information issues, including several rulemakings.
- Significantly furthered EPA's duties under the Toxic Substances Control Act (TSCA) by completing almost 2,400 Confidential Business Information (CBI) determinations on claims submitted in FY 2021.
- Defended the Agency in more than 60 Freedom of Information Act (FOIA) cases and more than 70 employment law matters. Completed 149 FOIA administrative appeals, eliminating the Agency's appeals backlog.
- Litigated and successfully resolved information law and employment law cases. Trained hundreds of management officials throughout the Agency on employment laws.

Performance Measure Targets:

Work under this program supports performance results in the Legal Advice: Environmental Program under the EPM appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$2,388.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$639.0) This program change is an increase to support Legal Advice: Support Program projects, with a priority for work related to defending the increase in litigation, addressing civil rights issues including External Civil Rights and equal protection, advising on FOIA requests, and ensuring the agencies work in contracts, grants, and appropriations is handled in accordance with the law.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Regional Science and Technology

Program Area: Legal / Science / Regulatory / Economic Review Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$466	\$638	\$4,923	\$4,285
Total Budget Authority	\$466	\$638	\$4,923	\$4,285
Total Workyears	0.5	1.7	6.7	5.0

Program Project Description:

EPA's Regional Science and Technology (RS&T) Program provides direct support to multiple programs for the Agency including implementing the Resource Conservation and Recovery Act (RCRA); Toxic Substances Control Act (TSCA); Clean Water Act (CWA); Safe Drinking Water Act (SDWA); Clean Air Act (CAA); and Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The RS&T Program supports the Agency's strategic goals by performing laboratory analysis, and mobile laboratory services to provide credible scientific data on environmental pollutants and conditions to Agency decision makers. The RS&T Program also assists state environmental agencies by providing specialized technical assistance including assistance to tribal communities to help build tribal capacity for environmental monitoring and assessment.

The RS&T Program provides essential expertise and scientific data for a wide array of environmental media, including ambient air; surface, drinking, and ground water; soil and sediment; solid and hazardous waste; and biological tissue. This work focuses on the immediate scientific information needed to make short-term local decisions. A strategic strength of the Regional Laboratory Network (RLN) is its ability to respond to events requiring surge capacity. In the event of an emergency or large-scale project, regional laboratories work together to leverage the strengths and capacities of individual lab facilities and deploy mobile laboratory services where needed.

Extreme weather events often disproportionally affect vulnerable populations including fence line communities most closely adjacent to chemical facilities. As extreme weather events increase in frequency, the public expectation for a rapid and effective response will continue to grow over time. These events often require assistance from the regional laboratory network for quick turnaround sample analyses as well as technical support. When extreme weather events occur, local area laboratories can become overwhelmed. For example, the response to winter storm Uri in 2021 required Region 4 and Region 7 to play a critical role in support of urgent analytical results needed in Region 6 to assist communities whose drinking water was threatened.³⁴²

³⁴²For more information please see: https://www.epa.gov/sciencematters/epa-deploys-mobile-labs-work-texas-restore-drinking-water-systems.

The RS&T Program provides support for areas such as environmental biology, microbiology, chemistry, field sampling, enforcement and criminal investigations, and quality assurance, as well as support for special or non-routine analytical requests that EPA cannot readily obtain from other sources within required timeframes. Funding for scientific equipment under this program is essential for maintaining high level capabilities in EPA regional laboratories. New and improved technology strengthens science-based decision-making for regulatory efforts, environmental assessment of contaminants, and development of critical and timely environmental data in response to accidents and natural or man-made disasters. As technology improves, the sensitivity of equipment advances to detect lower levels of contaminants. Newer, more advanced instrumentation improves environmental data collection and laboratory analytical capability.

FY 2023 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022-2026 EPA Strategic Plan.

In FY 2023, resources will continue to support regional implementation of the Agency's statutory mandates through fixed and mobile laboratory operations for environmental sampling, monitoring and enforcement compliance support. Resources improve timely decision-making in regional program management and implementation of regulatory work across all media and enable the Agency to address environmental issues specific to geographic areas (e.g., energy extraction, mining, wood treating operations, specialty manufacturing), natural disasters (e.g., Winter Storm Uri), and homeland security threats.

In FY 2023, regional laboratories will continue to coordinate within the Regional Laboratory Network to provide needed expert analytical services. The regional laboratories have the capability to analyze a full suite of contaminants using an array of established methods, including regulatory or guidance methods such as the RCRA, CWA and SDWA methods. Laboratories also utilize new methods based on immediate needs or circumstances. These efforts help support the underserved communities that benefit from response times for both routine and enforcement sample analyses related to brownfield sites in urban areas where legacy contamination persists. Since brownfield sites tend to be in densely developed, centralized locations, redevelopment in these areas lead to multiple positive outcomes in urban communities including reducing exposure to toxic chemicals, increased access to green space and reducing vehicle miles driven due to more efficient home/work travel patterns.³⁴³

In FY 2023, a new investment will provide for replacement and upgrading of aging analytical equipment and modernization of associated critical IT infrastructure. This will support the risk identification and assessment associated with pesticides, organic chemicals, and other high-risk chemicals, as well as support the Agency's science priorities related to informing communities at risk from increasing challenges from climate change, chemical exposures, and aging infrastructure. The Agency's mission to protect human health and the environment often requires the availability of scientific data at lower detection levels, which requires specialized equipment. Almost all

³⁴³ For mor information please see: https://www.epa.gov/brownfields/brownfields-program-environmental-and-economic-benefits.

scientific instrumentation is computer-controlled or interfaced. As computer technology improves, instrument efficiencies and sensitivity also improve – these advances in technology leading to lower detection levels of contaminants are essential for some compounds where health-based risk levels are decreasing (e.g., hexavalent chromium). When measuring for these compounds, the instrument detection levels need to be as low as technically feasible, requiring laboratories to modify an existing method, modify existing equipment, or purchase newer instrumentation.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$40.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$503.0) This increase will be used to support regional implementation of the Agency's statutory mandates through fixed and mobile laboratory operations for environmental sampling, monitoring and enforcement compliance support
- (+\$3,742.0 / +5.0 FTE) This new investment will be used to replace and upgrade aging analytical equipment and modernize associated critical IT infrastructure necessary to meet increasing demands for immediate scientific information needed to make short-term local decisions. This investment includes \$792.0 thousand in payroll.

Statutory Authorities:

Resource Conservation and Recovery Act (RCRA); Toxic Substances Control Act (TSCA); Clean Water Act (CWA); Safe Drinking Water Act (SDWA); Clean Air Act (CAA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Pollution Prevention Act (PPA); Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)

Regulatory/Economic-Management and Analysis

Program Area: Legal / Science / Regulatory / Economic Review Goal: Take Decisive Action to Advance Environmental Justice and Civil Rights Objective(s): Embed Environmental Justice and Civil Rights into EPA's Programs, Policies, and Activities

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$13,850	\$12,421	\$16,247	\$3,826
Total Budget Authority	\$13,850	\$12,421	\$16,247	\$3,826
Total Workyears	66.5	72.5	76.0	3.5

Program Project Description:

The Regulatory/Economic, Management, and Analysis Program is responsible for reviewing the Agency's regulations to ensure that they are developed in accordance with the governing statutes, executive orders, and Agency commitments and are based on sound technical, economic, scientific, and policy assumptions. Further, the Program ensures consistent and appropriate economic analysis of regulatory actions, conducts analyses of regulatory and non-regulatory approaches, and considers interactions between regulations across different environmental media. The Program provides all technical support to the Interagency Working Group on the Social Cost of Greenhouse Gases (GHGs) to develop final SC-CO₂, SC-N₂O and SC-CH₄ values required under Executive Order (EO) 13990, Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis. The Program helps to implement the President's Memorandum on Modernizing Regulatory Review³⁴⁴ and EO 13985 Advancing Racial Equity and Support for Underserved Communities Through the Federal Government³⁴⁵ by developing appropriate modeling, data, and analysis to inform the consideration of environmental justice (EJ) concerns in regulatory and non-regulatory actions. The Program ensures the Agency's regulations comply with statutory and EO requirements, including the Congressional Review Act, 346 the Regulatory Flexibility Act (as amended by the Small Business Regulatory Enforcement Fairness Act),³⁴⁷ and EOs 12866, Regulatory Planning and Review³⁴⁸ and 13563, Improving Regulation and Regulatory Review³⁴⁹ regarding the Office of Management and Budget (OMB) regulatory

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³⁴⁴ For more information on the Memorandum Modernizing Regulatory Review, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/modernizing-regulatory-review/.

³⁴⁵ For more information on EO 13985, please to see: https://www.federalregister.gov/documents/2021/01/25/2021-

 $[\]underline{01753/advancing\text{-}racial\text{-}equity\text{-}and\text{-}support\text{-}for\text{-}underserved\text{-}communities\text{-}through\text{-}the\text{-}federal\text{-}government}.}$

³⁴⁶ For more information on the Congressional Review Act, please see Subtitle E: https://www.govinfo.gov/content/pkg/PLAW-104publ121.pdf.

³⁴⁷ For more information on the Regulatory Flexibility act, please see: https://www.govinfo.gov/content/pkg/STATUTE-94/pdf/STATUTE-94-Pg1164.pdf, and as amended by the Small Business Regulatory Enforcement and Fairness Act, please see: https://www.govinfo.gov/content/pkg/PLAW-104publ121/pdf/PLAW-104publ121.pdf.

³⁴⁸ For more information on EO 12866 Regulatory Planning and Review, please see https://www.archives.gov/files/federal-register/executive-orders/pdf/12866.pdf.

³⁴⁹ For more information on EO 13563 Improving Regulation and Regulatory Review, please see:

³⁴⁹ For more information on EO 13563 Improving Regulation and Regulatory Review, please see: https://obamawhitehouse.archives.gov/the-press-office/2011/01/18/executive-order-13563-improving-regulation-and-regulatory-review.

review. The Program manages the development and deployment of EPA's economy-wide model for analyzing the economic impacts of environmental regulations. The Program also includes the Agency's Chief Statistical Official charged with implementing major elements of the *Foundations* for Evidence Based Policy Act. 350

FY 2023 Activities and Performance Plan:

Work in this program directly supports Strategic Goal 2/Objective 2.2, Embed Environmental Justice and Civil Rights into EPA's Programs, Policies, and Activities in the *FY 2022 - 2026 EPA Strategic Plan*.

The Program assists the Administrator and other senior agency leaders in implementing regulatory policy priorities.

In FY 2023, EPA will continue its efforts to assess and review the benefits and costs to communities, businesses, government entities, and the broader economy associated with each economically significant regulatory action to maximize the net benefits of policies protecting human health and the environment. EPA will conduct and integrate analysis of EJ concerns in the rulemaking process to address the Administration's priorities. EPA will collect data and build models to assess regulatory proposals and their impacts on benefits, economic performance, and EJ. Planned key program activities in FY 2023 include:

- Represent EPA on, and prepare information and analyses for, the Interagency Working Group on the Social Cost of GHGs, engage the public, stakeholders, and experts to provide recommendations for reviewing, and, as appropriate, updating, the social cost of carbon (SC-CO₂), social cost of nitrous oxide (SC-N₂O), and social cost of methane (SC-CH₄) to ensure that these costs are based on the best available economics and science.
- Represent EPA in recommending improvements to modernize the regulatory review process to promote policies that reflect new developments in scientific and economic understanding, fully accounts for regulatory benefits that are difficult or impossible to quantify and does not have harmful anti-regulatory or deregulatory effects. Develop procedures that consider the distributional consequences of regulations as part of any quantitative or qualitative analysis of the benefits and costs of regulations, to ensure that regulatory initiatives appropriately benefit and do not inappropriately burden underserved, vulnerable, or marginalized communities across all life stages.
- Support EPA's Chief Statistical Official, who will provide technical support for projects under EPA's Learning Agenda, evaluation plan, and capacity assessment; design statistically sound policy analyses and evaluations; assist in the continued development of EPA's Learning Agenda; and promote a culture of evidence-based decision making.
- Conduct training for EPA regulatory staff on a broad range of topics, including EPA's internal Action Development Process, developing EJ analysis for rulemakings, updated

³⁵⁰ For more information, please see: https://www.congress.gov/115/plaws/publ435/PLAW-115publ435.pdf.

Guidelines for Preparing Economic Analyses, and Congressional Review Act requirements to help ensure that rules meet policy goals and address legal and administrative requirements and are informed by high quality EJ and economic analyses.

- Expand analytic capabilities for conducting EJ analyses for rulemaking through development of flexible analytic tools and novel datasets.
- Implement EPA's updated EJ technical guidance, including new additions on addressing how the EJ analysis can be used to inform policy options to address EJ implications of rulemaking, and newer techniques and approaches to conducting EJ analyses.
- Release an updated version of *EPA*'s *Guidelines for Preparing Economic Analyses*, revised to incorporate updated analytic requirements and practices developed under the President's Memorandum on *Modernizing Regulatory Review*³⁵¹ and the recommendations from the Science Advisory Board's peer review. The updated guidelines will help ensure that EPA's economic analyses provide a complete accounting of the economic benefits, costs and impacts of regulatory actions, including distributional consequences, and are consistent across EPA programs.
- Deploy a model of the U.S. economy so that EPA routinely assesses how regulations affect the economy, including distributional impacts, costs, and broader macro-economic performance. EPA will update the model consistent with recommendations from EPA's Science Advisory Board, deploy the model in regulatory analyses where appropriate, and continue the development of open-source data resources to support transparent analyses. This model will provide critical evidence-based analyses to inform decision making.
- Continue to manage EPA's response to recently issued EOs, particularly with an eye toward identifying previous regulatory actions that are not consistent with current policies and working to develop new actions that constructively advance current policy positions.
- Review economic analyses prepared by EPA to ensure compliance with statutory and other related requirements. Provide the Administrator and the public with high-quality analyses of the costs, benefits, and impacts on jobs, businesses, and communities of major regulatory proposals to better inform decision-making and ensure transparency about the consequences of regulation. 352
- Apply the best modeling tools to assess the economic effects of approaches that reduce climate pollution in every sector of the economy, deliver EJ, and spur well-paying union jobs and economic growth, including methods designed to examine how alternative regulatory options affect employment. Continue development of open-source data and economic models, including sector-specific cost models, to support these efforts in a manner that maximizes the transparency of these EPA analyses.

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³⁵¹ For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/modernizing-regulatory-review/.

³⁵² For more information, please see: https://www.epa.gov/environmental-economics/guidelines-preparing-economic-analyses.

- Continue development of a modeling platform capable of assessing the benefits of national regulations that affect water quality. This effort will provide important evidence-based data and analyses, consistent with economic science best practices, to inform decision making.
- Strengthen available data and methods to estimate the monetized benefits of health outcomes of chemical exposures, water pollution, and air pollution for use in EPA's benefit cost analyses.
- Continue to develop EPA's semiannual unified Regulatory Agenda and manage EPA's compliance with the Congressional Review Act. 353
- Manage EPA's internal Action Development Process and expand and upgrade regulatory
 planning and tracking tools to facilitate timely decisions and coordination across programs,
 on multimedia regulatory and policy issues such as Per- and Polyfluoroalkyl Substances
 (PFAS), climate, and EJ. Review all regulatory actions prior to signature by the EPA
 Administrator to ensure Agency actions are of consistently high quality and supported with
 strong analysis.
- Serve as EPA's liaison with the Office of Information and Regulatory Affairs within OMB.
- Serve as EPA's liaison with the Office of the Federal Register by reviewing, editing, and submitting documents for publication, so that the public, states, other agencies, and Congress are informed about EPA's regulatory activities in a timely manner.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$811.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,356.0 / +2.0 FTE) This program change is an increase to support the Administration's goal to tackle the climate crisis and ensures consistent and appropriate economic analysis of regulatory actions including advancement of the Social Cost of Greenhouse Gases (SC-GHG). The investment includes \$363.0 thousand in payroll.
- (+\$659.0 / +1.5 FTE) This program change is an increase to support cross-agency coordination, analysis, and review of regulatory activity across statutory programs. A

³⁵³ For more information on the Congressional Review Act, please see: https://www.govinfo.gov/content/pkg/PLAW-104publ121.pdf.

particular emphasis is to be placed on pending climate regulations. This investment includes \$273.0 thousand in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Science Advisory Board

Program Area: Legal / Science / Regulatory / Economic Review Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$3,422	\$3,205	\$3,981	\$776
Total Budget Authority	\$3,422	\$3,205	\$3,981	\$776
Total Workyears	16.1	18.7	18.7	0.0

Program Project Description:

EPA's Science Advisory Board Staff Office (SABSO) manages two Federal Advisory Committees. Congress established the Agency's Science Advisory Board (SAB) in 1978, under the Environmental Research, Development, and Demonstration Act, to advise the Administrator on a wide range of highly visible and important scientific matters. The Clean Air Scientific Advisory Committee (CASAC) was established under the Clean Air Act Amendments of 1977 to provide independent advice to the EPA Administrator on the technical bases for EPA's National Ambient Air Quality Standards (NAAQS). The SAB and the CASAC, both statutorily mandated chartered Federal Advisory Committees, draw from a balanced range of non-EPA scientists and technical specialists from academia, states, independent research institutions, and industry. The Program provides management and technical support to these advisory committees. The Committees provide EPA's Administrator independent advice and objective scientific peer review on the technical aspects of environmental issues as well as the science used to establish criteria, standards, regulations, and research planning, as requested.³⁵⁴

In FY 2021, the SAB produced three scientific peer reviews while CASAC was not active. In March 2021, both the SAB and CASAC proceeded to reset membership (at the direction of the Administrator) to ensure the Board and Committee returned to its original, transparent process, and had adequate experts with the disciplines to align with the Agency's strategic priorities and forthcoming work. The temporary suspension explains the decrease of completed peer reviews from a combined 13 products the year prior, when the SAB produced two consultations and nine scientific peer reviews, and the CASAC produced two scientific peer reviews.

Since SABSO provides an in-house resource for EPA peer reviews, the Program costs are low in comparison to external peer review conducted by groups such as the National Academy of Sciences (NAS). Furthermore, agency costs have been significantly lower for virtual meetings due to the COVID-19 pandemic compared to face-to-face meetings.

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³⁵⁴ For more information, please see: http://www.epa.gov/sab/ and http://www.epa.gov/sab/ and http://www.epa.gov/sab/ and http://www.epa.gov/sab/ and http://www.epa.gov/sab/.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

Using the best available science and a credible, defensible, and transparent scientific process to support sound regulatory actions is a cornerstone value of the EPA. SABSO supports the EPA's mission by conducting independent, scientific, public, peer reviews of some of the most challenging regulatory and science-based topics facing EPA and America. In FY 2023, SABSO anticipates completing 14 to 16 peer reviews, consultations, and regulatory reviews in accordance with the Biden Administration's science and policy agenda, commitment to scientific integrity, environmental justice (EJ), and public transparency. In FY 2023, the CASAC is expecting completing reviews of NAAQS for several critical pollutants. These reviews will include the reconsideration of ozone as well as Nitrogen Oxides (NOx), Sulfur Oxides (SOx), Particulate Matter (PM) secondary, and lead. The SAB will conduct peer reviews on the PFAS drinking water standard, risk assessment models, climate science reports, economic analyses, EJ reports, and other projects. In addition, SABSO also expects to conduct four to seven regulatory reviews.

In FY 2022, the SABSO completed seating two new standing committees. The first is the Environmental Justice Science Committee (EJSC), which will support the Agency's efforts to decrease the environmental burdens and increase the environmental benefits of overburdened and vulnerable communities through science-based decision making. The EJSC will review work done by the Office of Research and Development (ORD) and Office of Policy. Work in this program directly supports EPA Administrator Michael Regan's message "Our Commitment to Environmental Justice" issued on April 7, 2021, 355 in addition to supporting implementation of Executive Order (EO) 13985,³⁵⁶ Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, and EO 14008, Tackling the Climate Crisis at Home and Abroad. 357 The second new standing committee which SABSO created is the Climate Science Committee (CSC). The CSC will mainly review work by EPA's ORD and Office of Air and Radiation to support the new Strategic Goal 4, Ensure Clean and Healthy Air for all Communities. In 2023, the EJSC and CSC expect to complete three climate and EJ risk analyses.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

³⁵⁵ For more information, please see: https://www.epa.gov/newsreleases/epa-administrator-regan-announces-new-initiativessupport-environmental-justice-and.

356 For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-

order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.

³⁵⁷ For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executiveorder-on-tackling-the-climate-crisis-at-home-and-abroad/.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$193.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$400.0) This program increase is for conducting peer reviews to support priority rulemakings and analyses, including PFAS and several critical pollutants.
- (+\$183.0) This program increase will support with conducting climate and EJ risk analyses.

Statutory Authority:

Environmental Research, Development, and Demonstration Authorization Act (ERDDAA); Federal Advisory Committee Act (FACA); and Clean Air Act (CAA).

Operations and Administration

Acquisition Management

Program Area: Operations and Administration Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$30,623	\$32,247	\$40,017	\$7,770
Leaking Underground Storage Tanks	\$245	\$132	\$132	\$0
Hazardous Substance Superfund	\$23,380	\$23,800	\$32,345	\$8,545
Total Budget Authority	\$54,248	\$56,179	\$72,494	\$16,315
Total Workyears	275.1	285.7	355.7	70.0

Program Project Description:

Environmental Programs and Management (EPM) resources in the Acquisition Management Program support EPA's contract activities, which cover planning, awarding, and administering contracts for the Agency. Efforts include issuing acquisition policy and interpreting acquisition regulations; administering training for contracting and program acquisition personnel; providing advice and oversight to regional procurement offices; and providing information technology (IT) improvements for acquisition.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Agency requests an investment of 35.0 FTE and approximately \$7.8 million to strengthen EPA's capacity to process new, increased, and existing award contract actions in a timely manner; advance EPA utilization of small and disadvantaged businesses; support "Made in America" initiatives; and support supply chain risk management activities for information and communication technology. This program will continue to assist the Agency in its efforts to process and award contract actions in a timely manner and in accordance with Federal Acquisition Regulation (FAR) and guidance from the Office of Management and Budget (OMB) Office of Federal Procurement Policy (OFPP). Timely and equitable procurement are crucial to EPA's mission.

In FY 2023, EPA will continue to support the implementation of supply chain risk requirements in Section 889 of the 2019 National Defense Authorization Act and the "Made in America Laws" referenced in Executive Order 14005, *Ensuring the Future Is Made in All of America by All of America's Workers*, 358 while furthering Category Management implementation requirements. EPA

³⁵⁸ For additional information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/25/executive-order-on-ensuring-the-future-is-made-in-all-of-america-by-all-of-americas-workers/.

also will focus on establishing a comprehensive architecture for the Agency's supply chain as well as mechanisms to identify and mitigate risk. EPA also will continue to identify activities and resources to modernize the acquisition process that will allow the Agency to connect with a more diverse business base to address inequities in the acquisition process and, thus, build domestic markets and capabilities.

In FY 2023, EPA will continue working to eliminate barriers to full and equal participation in agency procurement and contracting opportunities for all communities, including underserved communities. The Agency will promote the equitable delivery of government benefits and opportunities by making contracting and procurement opportunities available on an equal basis to all eligible providers of goods and services. This work aims to increase the percentage of EPA contract spend awarded to small businesses located in Historically Underutilized Business Zones (HUBZones). EPA's acquisition equity assessment and related industry listening sessions confirmed that small and disadvantaged businesses face unique challenges in accessing procurement opportunities. These businesses often lack dedicated resources and in-house capacity to master the myriad of complex federal requirements needed to capitalize on Agency acquisition and financial assistance opportunities.

In FY 2023, in support of Administration climate sustainability initiatives, EPA will work with applicable program offices to identify and prioritize procurement plans that spur innovation, commercialization, and deployment of clean energy technologies.

EPA remains committed to leveraging Category Management, Spend Under Management (SUM), Best-In-Class (BIC), and strategic sourcing principles in each of its programs and purchasing areas to save taxpayer dollars and improve mission outcomes. In FY 2023, EPA will continue to leverage data provided by the General Service Administration and implement spend analysis, trend analysis, and data visualization tools to measure progress toward the implementation of Category Management and the adoption of Federal Strategic Sourcing vehicles and BIC acquisition solutions.

OMB's Category Management focuses on total acquisition spend transitioned from contract vehicles that are unaligned with Category Management principles to the SUM Program. In accordance with OMB Memorandum M-22-03, *Advancing Equity in Federal Procurement*, ³⁵⁹ EPA revised its Acquisition Guidance section 8.0.100, *Requirements for Mandatory Use of Common Contract Solutions*, to add clarification of the SUM Tier 2-SB designation which is afforded to contracts of any size awarded to small and disadvantaged businesses. The revision emphasizes EPA's focus on small business utilization and ensures continued alignment with federal category management and equity goals. EPA is currently projecting to reach its FY 2023 OMB-designated SUM spend goal of 52 percent of total addressable spend. The Agency has initiated a Category Management strategy for IT and will award a consolidated/enterprise-wide mission support services contract for the Office of Land and Emergency Management as a SUM Tier 1 solution.

³⁵⁹ For additional information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/12/M-22-03.pdf.

Additionally, EPA is initiating strategic sourcing initiatives in the following areas while directing requirements resulting from the increased Bipartisan Infrastructure Law funding to SUM solutions:

- New Laboratory Equipment Maintenance solution
- Cell services (recompete)
- CyberFEDS resources software
- Office of Air & Radiation EARTH Agency-wide professional services solution
- Subscription solutions

In FY 2023, EPA will continue to implement SUM principles to leverage pre-vetted agency and government-wide contracts as part of the Agency's effort to utilize more mature, market-proven acquisition vehicles. Through SUM Tier 2 and BIC solutions, EPA will leverage acquisition experts to optimize spending within the government-wide category management framework and increase the transactional data available for agency-level analysis of buying behaviors. To modernize the acquisition process and remove barriers to entry for obtaining government contracts, EPA has developed two innovative tools available agencywide: the EPA Solution Finder, which provides solution and ordering information for all EPA enterprise-wide contract solutions; and the BIC Opportunity Tool, which recommends BIC solutions to address newly identified agency requirements for commodities and services and those supported on expiring contracts.

EPA also will continue to maximize its Strategic Sourcing Program (SSP), thereby enhancing purchase coordination, improving price uniformity and knowledge-sharing, and leveraging small business capabilities to meet acquisition goals. The SSP allows the Agency to research, assess, and award contract vehicles that will maximize time and resource savings. The SSP serves as a foundation for effective financial and resource management because it simplifies the acquisition process and reduces costs. Long-term implementation of the SSP is transforming the Agency's acquisition process into a strategically driven function, ensuring maximum value for every acquisition dollar spent. In the first quarter of FY 2022, EPA realized \$9.6 million cost avoidance in specific, measurable costs for: five agencywide software solutions; print services; cellular services; shipping; voice services; office supplies; lab supplies; computers; furniture and furniture management services; and laboratory equipment maintenance. Since the beginning of the Strategic Sourcing Program in FY 2013, EPA has achieved cost avoidance of \$38.1 million.

In FY 2023, EPA will continue to evaluate options for replacing the EPA Acquisition System with an approved government-wide Federal Shared Service Provider for a contract writing system in line with government-wide mandates to increase the use of shared services. The Agency is focusing on a modern acquisition solution that reduces costs while increasing efficiency by standardizing federal procurement planning, contract award, administration, and close-out processes. Transition preparations include data management strategies, business process reviews, and user engagement to develop a business case and ensure data elements conform with Federal Government Procurement standards. As part of this effort, in FY 2023, EPA will utilize a new Government-wide Unique Entity Identifier for acquisition awards in line with General Services Administration and OMB requirements. EPA also will continue implementing the Financial

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³⁶⁰ OMB-19-16 "Centralized Mission Support Capabilities for the Federal Government, for more information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2019/04/M-19-16.pdf.

Information Technology Acquisition Reform Act (FITARA)³⁶¹ by competing contracts with multiple vendors or confining the scope of the contract to a limited task, thereby avoiding vendor lock-in, and developing acquisition vehicles that support the Agency in FITARA compliance and implementation.

Performance Measure Targets:

Work under this program supports performance results in the Small Minority Business Assistance Program under the EPM appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$1,214.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$6,556.0 / +35.0 FTE) This program change will strengthen EPA's capacity to process new, increased, and existing award contract actions in a timely manner; advance EPA utilization of small and disadvantaged business; support "Made in America" initiatives; and support supply chain risk management activities for information and communication technology. This investment includes \$6.0 million in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

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³⁶¹ For additional information, please refer to: https://www.congress.gov/113/plaws/publ291/PLAW-113publ291.pdf#page=148%5D.

Central Planning, Budgeting, and Finance

Program Area: Operations and Administration Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$71,528	\$76,718	\$89,154	\$12,436
Leaking Underground Storage Tanks	\$343	\$416	\$448	\$32
Hazardous Waste Electronic Manifest System Fund	\$154	\$0	\$0	\$0
Hazardous Substance Superfund	\$26,775	\$26,561	\$28,806	\$2,245
Total Budget Authority	\$98,800	\$103,695	\$118,408	\$14,713
Total Workyears	438.8	462.0	470.0	8.0

Total workyears in FY 2023 include 2.0 FTE funded by TSCA fees.

Program Project Description:

Activities under the Central Planning, Budgeting, and Finance Program support the management of integrated planning, budgeting, financial management, performance and accountability processes, risk assessments and reporting, and financial systems to ensure effective stewardship of resources. This includes managing and supporting the Agency's financial management systems. Functions include financial payment and support services for EPA; general and specialized fiscal and accounting services for many of EPA's programs; strategic planning and accountability for environmental, fiscal, and managerial results; executing an Enterprise Risk Management Program to support effective and efficient mission delivery and decision-making; providing policy, systems, training, reports, and oversight essential for EPA's financial operations; managing the agencywide Working Capital Fund (WCF); and managing the Agency's annual budget process. This program supports agency activities to meet requirements of the Government Performance and Results Modernization Act (GPRMA) of 2010; ³⁶² the Digital Accountability and Transparency (DATA) Act of 2014; ³⁶³ the Federal Information Technology Acquisition Reform Act (FITARA) of 2015; ³⁶⁴ the Federal Management Financial Integrity Act (FMFIA); ³⁶⁵ the Inspector General Act of 1978, as Amended; ³⁶⁶ and the Foundations for Evidence-Based Policymaking Act of 2018. ³⁶⁷

Total workyears in FY 2023 include 39.0 FTE to support Central Planning, Budgeting, and Finance working capital fund (WCF) services.

³⁶² For more information, please see: https://www.congress.gov/111/plaws/publ352/PLAW-111publ352.pdf.

³⁶³ For more information, please see: https://www.congress.gov/113/plaws/publ101/PLAW-113publ101.pdf.

³⁶⁴ FITARA became law as a part of the National Defense Authorization Act for Fiscal Year 2015 (Title VIII, Subtitle D), https://www.congress.gov/113/plaws/publ291/PLAW-113publ291.pdf.

³⁶⁵ For more information, please see: https://www.govinfo.gov/content/pkg/STATUTE-96/pdf/STATUTE-96-Pg814.pdf.

³⁶⁶ For more information, please see: https://www.govinfo.gov/content/pkg/STATUTE-92/pdf/STATUTE-92-Pg1101.pdf.

³⁶⁷ For more information, please see: https://www.congress.gov/115/plaws/publ435/PLAW-115publ435.pdf.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Agency requests an additional \$12.4 million and 7.6 FTE. This increase is to support implementation of the Foundations for Evidence-Based Policymaking Act of 2018 and systems modernization and provide for necessary fixed costs increases. EPA will continue to provide resource stewardship to ensure that all agency programs operate with fiscal responsibility and management integrity, financial services are efficiently and consistently delivered nationwide, and programs demonstrate results. EPA will maintain key planning, budgeting, performance measurement, and financial management activities but also implement enhancements to technical training, outreach, and reporting to assistance recipients and programs with a goal of reducing the barriers to managing what can be complex federal requirements intended to ensure sound financial management. EPA will ensure secure and efficient operations and maintenance of core agency financial management systems: Compass, PeoplePlus (Time and Attendance), Budget Formulation System, which includes a Performance Module, and related financial reporting systems. The Agency continues to modernize its financial systems to gain greater efficiencies through leveraging the accounting system and eliminating legacy systems, as well as provide accessible tools to manage resources and track performance. For example, the Agency is implementing a new integration with its financial system, to better track and account for its bills associated with the e-Manifest Program (a national hazardous waste electronic manifest tracking system for transport activities). This integration will improve the data quality and timeliness for the manifest transactions, in addition to aligning more to federal accounting standards for receivables. Robotics Process Automation (BOTS) will be one part of the overall strategy to reduce manual work and improve efficiency. EPA will focus on ensuring a standardized approach across all financial systems for granting access, managing access and the ability to audit access in a structured manner. This will allow the Agency to address over 50 specific security controls. EPA will continue to expand and enhance easy to use dashboards for financial management. Dashboards are now in place to support payroll and FTE management, and to support GPRMA performance planning and systematic tracking of progress.

In FY 2023, EPA will continue to standardize and streamline internal business processes, reduce the number of administrative systems, and adopt federal shared services when supported by business case analysis. Modernizing or integrating legacy payment systems will continue to be a focus, and funds are requested to support the planning and analysis to start the next effort, as well as the analysis needed for the Agency's Time and Attendance system alternatives. For example, EPA has implemented Treasury's Invoice Processing Platform (IPP) for reviewing invoices and paying commercial vendors. As of February 2022, roughly 95 percent of contract invoices are being handled through this system, resulting in staff efficiencies for processing invoice payment due to increased automation. Beginning in FY 2023, EPA will add additional payment types to this system, including Superfund Contract Lab Program payments through a system interface and miscellaneous obligations, which will utilize the IPP Self-Service module. This implementation will greatly reduce manual effort, improve data quality, and allow for the elimination of two legacy administrative systems.

By the end of FY 2022 and through FY 2023, EPA will focus on the implementation of G-Invoicing, Treasury's Interagency Agreement system. G-Invoicing will integrate into the Agency's accounting system as part of a government-wide effort to standardize and improve financial management of interagency agreements. The goal of G-Invoicing is to align EPA's business processes to deliver a new and more streamlined approach for the end-to-end delivery of financial transactions for Interagency Agreements. This will involve implementing a new version of EPA's accounting systems software in FY 2022. Extensive testing and training will be needed to implement other associated business process changes and system touchpoints. By the end of FY 2022, the Agency will begin brokering and processing all new Interagency Agreements within G-invoicing. In FY 2023, the Agency will work on ensuring that all open Interagency Agreements are migrated into G-invoicing. The Agency's goal is to fully implement G-invoicing for new and existing agreements by the Treasury mandated date of October 1, 2023.

Over the next several years, other federal shared services that will impact financial transactions are likely to be offered. EPA will further standardize processes to prepare for the new shared federal payroll or time and attendance systems. Equally important is the ability to adapt systems to meet increased transparency needs, such as those prescribed in the DATA Act. The DATA Act reporting will continue to evolve with more stringent timelines, certification requirements, data standards and validation checks, as well as additional areas of federal financial spending. The Agency plans to be flexible to adapt to the new transparency needs, to provide timely and accurate spending information to the public.

In FY 2023, resources are requested to support formal evaluations as well as efforts to improve critical data collections and data sharing in priority areas as directed by the Foundations for Evidence-Based Policymaking Act of 2018. In alignment with the Act, EPA has been steadily building the capacity for this important work, and in FY 2022 established the policy framework for the Agency's evaluation program. In FY 2023, the Agency will start implementing the larger goals of the Act and is requesting resources to support the use of high-quality evaluation to ensure programs are effective as designed. In alignment with the Act, EPA will use findings from the FY 2022 capacity assessment to prioritize strategic investments at an enterprise level that will expand capacity for robust evaluation, data use, research and development, analysis, and Lean Management. The Act requires EPA to develop an evidence-building portfolio to support policy and program implementation decisions by generating evaluation studies to help the Agency improve, advance, or modify existing programs, policies, projects, or operations. In FY 2023, EPA will further develop the Agency's learning agenda, build evaluation and evidence-building into the planning for new and enhanced programs, enhance strategic and annual planning, collaborate with external evaluation experts, and produce implementation guidance for EPA's evaluation policy framework. EPA will invest in evaluation and other evidence-building activities addressing environmental justice (EJ), climate change, community engagement, equity, diversity, and inclusion. Also, as part of the Agency's FY 2023 evidence-building portfolio, EPA will lead a cross-government effort to develop evidence-building guidelines and initiate evaluation studies related to the execution of the Infrastructure Investment and Jobs Act of 2021 (IIJA) investments.

In FY 2023, the Program will continue to focus on core responsibilities in the areas of strategic planning; performance measurement, assessment, and reporting; enterprise risk management; budget preparation; financial reporting; and transaction processing. As the Agency lead in

designing and implementing performance measurement and risk management strategies that inform Agency decision-making and advance mission results, the Program will focus on driving progress toward the Administrator's priorities by regularly assessing performance results against ambitious targets, monitoring and mitigating risks, and adjusting strategies as needed. This includes convening Quarterly Performance Reviews (QPRs) to assess progress; promoting an increased use of data analytics and evidence-based decision-making practices; working collaboratively with Agency programs to assess and analyze performance and risk data; and providing technical assistance on agencywide measures of governance to enhance data quality. EPA also will continue to use the performance data and other evidence to answer fundamental business questions and identify opportunities for service improvements.

During FY 2023, EPA will continue to leverage a management system that uses Lean Management techniques and tools to promote continuous improvement. Lean Management techniques will continue to complement EPA's performance framework to help the Agency meet the requirements and spirit of the GPRMA. As of February 2022, EPA has improved nearly 1,100 processes and implemented over 5,000 employee ideas. Improvements and innovations have been made in administrative areas, such as acquisitions, Freedom of Information Act (FOIA) response, and in many programmatic areas. For example, the management system helped EPA reduce its water permit backlog and achieve reductions in areas not attaining air pollution standards by 25 percent. The management system also has helped EPA elevate and solve problems more effectively. For example, thanks to systematic problem-solving, EPA's Office of Enforcement and Compliance Assurance was able to help several EPA regions address challenges related to Internet sales of illegal vehicles and engines not meeting air quality standards.

Moving forward, EPA will continue measuring process improvements as a long-term performance goal in support of the FY 2022 – 2026 EPA Strategic Plan. EPA has worked to increase the flexibility of its Continuous Improvement Program to better integrate with the Agency's range of programs and approaches. EPA also expects to continue supporting states and tribes in adopting its Lean Management techniques to improve processes related to authorized or delegated federal programs, and in key priority areas, such as EJ. To date, environmental quality departments in Maryland, Connecticut, New Hampshire, Texas, Oklahoma and most recently the District of Columbia have adopted and deployed the Lean Management techniques in partnership with EPA.

EPA has made significant strides in recent years to bring programs that were considered susceptible to improper payments, to a point where the improper payments are at very low rates. However, the Agency continues to be vigilant in its payment reviews. Annually, EPA conducts Internal Control reviews of multiple programs. In addition, as required by Payment Integrity Information Act of 2019 (PIIA) (P.L. 116-117),³⁶⁸ and OMB Memorandum M-21-19 Appendix C,³⁶⁹ EPA is conducting a triennial risk assessment review of all of its payment streams. Other improvements include the recent implementation of upgraded systems used for payments and invoice processing through which the Agency anticipates even fewer payment errors moving forward. To strengthen our processes, EPA is developing risk assessment plans for significant new funding the Agency receives. These risk assessments will outline any differences in authorities or new requirements of the funding, potential areas that will need additional guidance as well as

³⁶⁸ For more information, please see: https://www.congress.gov/116/plaws/publ117/PLAW-116publ117.pdf.

³⁶⁹ For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/03/M-21-19.pdf.

tracking and reporting, performance measures and internal controls that will be established to prevent and detect possible improper payment activities.

The Program will continue to conduct internal control program reviews and use the results and recommendations from the Office of Inspector General to provide evidence of the soundness of EPA's financial management program and identify areas for further improvement. The Program will collect key operational statistics for its financial management program to further evaluate its operations and for management decision-making. For example, in FY 2019, EPA observed a trend that Agency corrective actions were increasingly being implemented beyond the agreed upon resolution date. OCFO continues to engage more and more with the community to ensure the close out or extension requests were completed. Additionally, OCFO is adding in validation and documentation measures to ensure that the process is standardized across the Agency while providing more customer-level support. In addition, EPA is dedicated to reducing fraud, waste, and abuse, and strengthening internal controls over improper payments.

The Program will continue to support FITARA requirements in accordance with EPA's Implementation Plan.³⁷⁰ The Chief Information Officer will continue to be engaged throughout the budget planning process to ensure that information technology needs are properly planned and resourced in accordance with FITARA.

Performance Measure Targets:

(PM CF2) Number of Agency administrative systems and system interfaces.	FY 2022 Target	FY 2023 Target
	17	17
(PM OP1) Number of operational processes improved.	FY 2022	FY 2023
	Target	Target

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$6,425.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

200

200

- (+5,027.0 / +6.0 FTE) This program change reflects an increase to support implementation of the Foundations for Evidence-Based Policymaking Act of 2018 in the regional offices. Funding also will allow headquarters offices to lead a coordinated cross-agency process supporting the design and execution of evaluations of IIJA investments. This investment includes \$1.051 million in payroll.
- (+\$984.0 / +1.6 FTE) This program change reflects an increase to allow the Agency to continue its efforts to modernize and streamline its financial systems and processes. This program change also funds the effort to scale up support needed to implement increased

³⁷⁰ For more information, please see: http://www.epa.gov/open/fitara-implementation-plan-and-chief-information-officer-assignment-plan.

workload on grant payments and provide essential workforce support, training and working capital fund needs. This investment includes \$280.0 thousand in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5 App.) (EPA's organic statute).

Facilities Infrastructure and Operations

Program Area: Operations and Administration Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$257,524	\$285,441	\$288,293	\$2,852
Science & Technology	\$65,093	\$67,500	\$68,912	\$1,412
Building and Facilities	\$36,071	\$27,076	\$73,894	\$46,818
Leaking Underground Storage Tanks	\$932	\$836	\$724	-\$112
Inland Oil Spill Programs	\$628	\$682	\$641	-\$41
Hazardous Substance Superfund	\$81,976	\$68,727	\$71,219	\$2,492
Total Budget Authority	\$442,223	\$450,262	\$503,683	\$53,421
Total Workyears	334.2	315.4	325.4	10.0

Total work years in FY 2023 include 5.4 FTE to support Facilities Infrastructure and Operations working capital fund (WCF) services.

Program Project Description:

Environmental Programs and Management (EPM) resources in the Facilities Infrastructure and Operations Program fund the Agency's rent, utilities, and security. The Program also supports centralized administrative activities and support services, including health and safety, environmental compliance and management, facilities maintenance and operations, space planning, sustainable facilities and energy conservation planning and support, property management, mail, and transportation services. Funding for such services is allocated among the major appropriations for the Agency.

This program also includes the Agency's Protection Services Detail (PSD) that provides physical protection for the Administrator through security for daily activities and events. The PSD coordinates all personnel and logistical requirements including scheduling, local support, travel arrangements, and the management of special equipment.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2023, the Agency requests an investment of more than \$2.8 million and 9.0 FTE to support agencywide climate sustainability and resiliency initiatives and EPA facilities projects. EPA will continue to invest in the reconfiguration of EPA's workspaces, enabling the Agency to release office space and avoid long-term rent costs, consistent with HR 4465,³⁷¹ the *Federal Assets Sale*

³⁷¹ For additional information, please refer to: https://www.congress.gov/bill/114th-congress/house-bill/4465, Federal Assets Sale and Transfer Act of 2016.

and Transfer Act of 2016. EPA is implementing a long-term space consolidation plan that aims to reduce the number of occupied facilities, consolidate and optimize space within remaining facilities, and reduce square footage wherever practical. EPA also will continue working to enhance its federal infrastructure and operations in a manner that increases efficiency. For FY 2023 the Agency is requesting \$155.33 million for rent, \$4.57 million for utilities, and \$27.81 million for security in the EPM appropriation. EPA uses a standard methodology to ensure that rent charging appropriately reflects planned and enacted resources at the appropriation level.

EPA also will work to secure physical and operational resiliency for Agency facilities. As part of this work, EPA will continue conducting climate resiliency assessments at all EPA-owned facilities to identify critical upgrades that are necessary to improve facility resiliency against the impacts of climate change, such as roofing stability or seawall construction projects. In FY 2023, EPA will conduct climate assessments at the following facilities: Cincinnati Test and Evaluation Facility, Duluth Environmental Center, Ada Gaar Corner, Ada Environmental Research Center, Region 10 Laboratory – Manchester. EPA will initiate all high-priority projects within 24 months of the completion of a climate assessment.

Further, EPA will continue reconfiguring EPA's workplaces with the goal of reducing long-term rent costs while increasing EPA facility sustainability to combat the effects of climate change and ensuring a space footprint that accommodates a growing workforce. Space reconfiguration enables EPA to reduce its footprint to create a more efficient, collaborative, and technologically sophisticated workplace. However, even if modifications are kept to a minimum, each move requires initial funding to achieve long-term cost avoidance and sustainability goals. These investments support sustainable federal infrastructure, a clean energy future, and goals to achieve net-zero emissions by 2050.

In FY 2023, EPA will pursue aggressive energy, water, and building infrastructure requirements with emphasis on environmental programs (e.g., Environmental Management Systems, Environmental Compliance Programs, Leadership in Energy and Environmental Design Certification, alternative fuel use, fleet reductions, telematics, sustainability assessments). This investment in infrastructure (e.g., architectural and design) and mechanical systems (e.g., Optimized Building Managements Systems for heating and cooling with load demand driven controls) is necessary to meet the Administration's climate sustainability goals. Additionally, in 2023, EPA will direct \$1.4 million to continue the Agency's transition to electric vehicles through direct purchase (mobile lab vehicles) or lease through the General Services Administration (GSA) for all future fleet procurements where economically feasible. EPA also will identify opportunities to build out necessary charging infrastructure at EPA facility locations. EPA's goal is to use 100 percent carbon pollution-free electricity on a net annual basis by 2030.

EPA also will meet regulatory Occupational Safety and Health Administration (OSHA) obligations and provide health and safety training to field staff (e.g., inspections, monitoring, onscene coordinators) and track capital equipment of \$25 thousand or more. The Agency will continue its partnership with GSA to utilize shared services solutions, *USAccess* and Enterprise Physical Access Control System (ePACS) programs. *USAccess* provides standardized HSPD-12 approved Personal Identity Verification (PIV) card enrollment and issuance and ePACS provides centralized access control of EPA space, including restricted and secure areas.

Performance Measure Targets:

(PM CRP) Percentage of priority climate resiliency projects for EPA-owned	FY 2022	FY 2023
facilities initiated within 24 months of a completed facility climate	Target	Target
assessment and project prioritization.		100
(PM CAA) Number of EPA-owned facility climate adaptation assessments	FY 2022	FY 2023
completed.	Target	Target
	2	5

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$863.0) This change to fixed and other costs is a net increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. This change includes adjustments to rent, utilities, security, and transit subsidy needs.
- (+\$1,989.0 / +9.0 FTE) This program change is an increase to support agencywide climate sustainability and resiliency initiatives and EPA facilities projects that will ensure the Agency has an optimal footprint to support the proposed FTE increase in the FY 2023 Budget request. This investment includes \$1.5 million in payroll.

Statutory Authority:

Federal Property and Administration Services Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Financial Assistance Grants / IAG Management

Program Area: Operations and Administration Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$27,294	\$25,430	\$33,040	\$7,610
Hazardous Substance Superfund	\$4,224	\$3,210	\$4,403	\$1,193
Total Budget Authority	\$31,518	\$28,640	\$37,443	\$8,803
Total Workyears	137.0	139.5	184.5	45.0

Program Project Description:

Environmental Program and Management (EPM) resources in the Financial Assistance Grants and Interagency Agreement (IA) Management Program support the management of grants and IAs as well as suspension and debarment activities for assistance and procurement programs. Grants and IAs historically comprise approximately 60 percent of EPA's annual appropriations. Resources in this program ensure EPA manages grants and IAs to meet the highest fiduciary standards and achieve measurable results for environmental programs and Agency priorities, and that the government's financial resources and business interests are protected from fraud and mismanagement.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA requests an additional investment of \$7.6 million and 40.0 FTE to provide technical assistance and outreach to first time recipients of federal funding; improve capacity for oversight and tracking of new and increased grant investments; and process financial assistance agreements in a timely manner. EPA will continue to implement grants management activities to achieve efficiencies while enhancing quality and accountability and ensuring that opportunities for competitive grants are made publicly available so that all eligible applicants have an opportunity to compete for them. EPA also will explore methods to use or update the grant competition and grant-making processes to promote racial equity and support for underserved communities. For example, EPA will provide technical assistance to potential grantees from underserved communities on sound financial management practices to reduce barriers to competition for EPA grant resources. EPA also will track grant place of performance to determine whether underserved and environmental justice (EJ) communities are realizing the benefits of EPA grant programs.

EPA will continue investments in modernizing grant and IA information technology/information management (IT/IM) systems, support the improved capacity for oversight and tracking of new

and increased grant investments, and ensure the timely processing of financial assistance agreements. EPA will manage its Next Generation Grants System (NGGS) in conjunction with the retirement of an outdated legacy grants management system. NGGS aligns with the requirements of the Grant Reporting Efficiency and Agreements Transparency (*GREAT*) Act, applicable Office of Management and Budget (OMB) Quality Service Management Offices (QSMO) standards, and the Federal Integrated Business Framework for grants (e.g., required standard data elements for grants reporting). In FY 2023, EPA will operate and maintain an electronic grants record management system that integrates with EPA's enterprise records management system and aligns with applicable QSMO standards. The Agency also will utilize the government-wide Unique Entity Identifier system for grant awards to meet OMB requirements.

Further, EPA will continue to focus on reducing the administrative burden on EPA and grant applicants and recipients, and on improving grants management procedures. The Agency will continue implementing the FY 2021-2025 Grants Management Plan, focusing on the award and effective management of assistance agreements, enhancing partnerships within the grants management community, promoting environmental justice, and ensuring effective grant oversight and accountability.

By October 1, 2022, EPA will have completed activities to align its IA business processes to ensure compatibility with the government-wide mandate to adopt G-Invoicing, the federal shared service for intragovernmental transactions. EPA provides quarterly progress updates to Treasury that highlight activities under the Agency's approved G-Invoicing Implementation Plan.

In FY 2023, the Agency will continue to make use of discretionary debarments and suspensions as well as statutory disqualifications under the Clean Air Act and Clean Water Act to protect the integrity of federal assistance and procurement programs. Congress and federal courts have long recognized federal agencies' inherent authority and obligation to exclude non-responsible parties from eligibility to receive government contracts and federal assistance awards (e.g., grants, cooperative agreements, loans, and loan guarantees).

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$752.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$6,858.0 / +40.0 FTE) This program change will support technical assistance and outreach to first time recipients of federal funding; improve capacity for oversight and tracking of new and increased grant investments; and the timely processing of financial assistance agreements. This investment includes \$6.833 million in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Federal Grant and Cooperative Agreement Act; Federal Acquisition Streamlining Act § 2455.

Human Resources Management

Program Area: Operations and Administration Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$48,256	\$46,229	\$66,087	\$19,858
Hazardous Substance Superfund	\$7,200	\$6,202	\$8,476	\$2,274
Total Budget Authority	\$55,456	\$52,431	\$74,563	\$22,132
Total Workyears	228.3	229.9	316.4	86.5

Total workyears in FY 2023 include 0.2 FTE to support Human Resources Management working capital fund (WCF) services.

Program Project Description:

Environmental Programs and Management (EPM) resources for the Human Resources (HR) Management Program support human capital management (HCM) activities throughout EPA. To help achieve its mission and maximize employee productivity and job satisfaction, EPA continually works to improve business processes for critical HCM functions including recruitment, hiring, employee development, performance management, leadership development, workforce planning, and labor union engagement. This includes personnel and payroll processing through the Human Resources Line of Business. EPM resources also support overall federal advisory committee management and Chief Human Capital Officer Council activities under applicable statutes and guidance, including the Agency's Human Capital Operating Plan.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Agency requests an additional investment of \$19.9 million and 73.7 FTE to support the implementation of EPA's Diversity, Equity, Inclusion, and Accessibility (DEIA) Strategic Plan, expand EPA's intern program, support EPA's Learning Agenda's evidence-gathering activities, and strengthen agencywide capacity to quickly increase staff levels in key offices and programs. Effective workforce management is critical to EPA's ability to accomplish its mission. EPA's efforts in HR functions are focused on strengthening the workforce, retaining critical expertise, and capturing institutional knowledge. EPA continues developing mechanisms to ensure that employees have the right skills to successfully achieve the Agency's core mission today and in the future.

The Agency is actively involved with OPM's Chief Human Capital Officer Council and the President's Management Council Agenda to address the challenges of the 21st Century federal workforce. In FY 2023, in line with President Biden's *Executive Order on Diversity, Equity*,

Inclusion, and Accessibility in the Federal Workforce, ³⁷² EPA will implement the actions identified in the DEIA Strategic Plan to assess whether Agency recruitment, hiring, promotion, retention, professional development, performance evaluations, pay and compensation policies, reasonable accommodations access, and training policies and practices are equitable. EPA will take an evidence-based and data-driven approach to determine whether and to what extent Agency practices result in inequitable employment outcomes, and whether Agency actions may help to overcome systemic societal and organizational barriers. Further, the Agency will assess the status and effects of existing diversity, equity, inclusion, and accessibility initiatives or programs, and review the institutional resources available to support human resources activities. For areas where evidence is lacking, the Agency will propose opportunities to advance diversity, equity, inclusion, and accessibility, addressing those gaps. EPA will continue to involve employees at all levels of the organization in the assessment of DEIA initiatives and programs.

In FY 2023, EPA will support the following DEIA initiatives:

- EPA will plan a Senior Executive Service Candidate Development Program, projected to start in early FY 2024. The Program will focus on diversity, equity, inclusion, and accessibility so future executives reflect the diversity of the American people and are effectively trained in the skills necessary to lead a diverse workforce that operates in a hybrid work environment.
- EPA will develop and implement a centralized paid internship program, which expands on existing internship opportunities across the Agency to strengthen talent and workforce acquisition. This paid internship program will focus on expanding federal work experience opportunities for underrepresented and underserved populations, which may experience barriers to applying or fully participating in existing opportunities. EPA will provide approximately 180 four-month internship opportunities in every EPA Headquarters and Regional Office. Additionally, EPA will establish a plan to convert eligible interns to permanent federal service based on performance and completing program requirements.

EPA has increased efforts to improve Diversity and Inclusion with virtual outreach events, targeting diverse networks such as veterans, Historically Black Colleges and Universities, and Returned Peace Corps Volunteers. To recruit EPA's next generation of employees, EPA will continue outreach to new potential sources for future employees and use all available hiring authorities, including Schedule A, and recruitment incentives. In FY 2023, EPA will continue to work with Science, Technology, Engineering and Mathematics-focused institutions and organizations, like the Society of Hispanic Professional Engineers, and will participate in the President Management Council's Interagency Rotational Program to create leadership development assignments for GS 13-15 level employees. EPA reviews applicant flow data analysis on diversity every quarter to assess progress and identify areas for improvement.

In FY 2023, EPA will continue to implement flexible work policies in line with OMB Memoranda M-21-25 - Integrating Planning for A Safe Increased Return of Federal Employees and Contractors to Physical Workplaces with Post-Reentry Personnel Policies and Work

³⁷² For additional information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/06/25/executive-order-on-diversity-equity-inclusion-and-accessibility-in-the-federal-workforce/.

Environment,³⁷³ including designation of remote work status to certain positions, providing work schedule flexibilities, and increasing the use of telework. EPA strives to be a model federal employer and these efforts will strengthen the Agency's ability to attract, recruit, retain, and empower top talent while advancing diversity, equity, inclusion, and accessibility.

EPA will identify the most critical need for climate literacy training for its workforce. These efforts will focus on integrating climate adaptation, risk disclosure, and other education activities into the management of EPA's procurement, real property, public lands and waters, and financial programs.

EPA also will continue supporting evidence-building activities to implement a workforce strategy guided by data-driven decisions as part of its implementation of the Evidence Act through the Workforce Planning learning priority area in EPA's Learning Agenda. This work includes determining Mission Critical Competencies, enhancement of EPA's competency assessment tool, skills gap analysis across the Agency, and knowledge transfer strategies to support succession planning.

In FY 2023, EPA will continue to operate and maintain the Talent Enterprise Diagnostic (TED) tool to allow EPA to make data-driven, strategic workforce decisions. TED data will serve a crucial role in EPA's Workforce Planning and Succession Management activities by identifying potential competency gaps across the Agency and by increasing management's understanding of where needed skill sets should reside within EPA. Additionally, EPA will continue to maintain and operate dashboards related to Mission Critical Occupations, Workforce Demographics, and Diversity. These dashboards provide data visualizations and easy-to-understand information about the current workforce, assisting EPA with succession planning by identifying workforce gaps due to anticipated retirements and attrition trends, which is critical considering that approximately 25 percent of EPA's workforce is retirement eligible, and another 19 percent of the current workforce will become retirement eligible over the next five years.

The Agency will continue to implement Executive Order 14003, *Protecting the Federal Workforce*, ³⁷⁴ issued on January 22, 2021. EPA reviewed its unions' agreements to identify and eliminate provisions influenced by four revoked executive orders and will increase the focus on pre-decisional involvement and interest-based bargaining. In FY 2023, EPA will continue working to reset and repair relationships and involve unions in a collaborative way, promoting the Agency's and the unions' shared goal of the positive and equitable treatment of newly empowered employees.

Finally, EPA's advisory committees, operating as catalysts for public participation in policy development, implementation, and decision making, have proven effective in building consensus among the Agency's diverse external partners and stakeholders. In line with President Biden's Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based

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³⁷³ For additional information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/06/M-21-25.pdf.

³⁷⁴ For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/22/executive-order-protecting-the-federal-workforce/.

Policymaking, ³⁷⁵ EPA remains committed to ensuring that highly qualified external experts serve on Agency committees and that those members and future nominees of EPA advisory committees reflect the diversity of America in terms of gender, race, ethnicity, geography, and other characteristics.

Performance Measure Targets:

(PM DEIA) Diversity, Equity, Inclusivity, and Accessibility (DEIA) Maturity Level achieved.	FY 2022 Target	FY 2023 Target
		L1

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$3,693.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE in this program project due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. This change also includes other Agency fixed costs such as sign language support for deaf and hard of hearing employees, workers compensation, and childcare tuition assistance programs.
- (+\$4,200.0 / +45.0 FTE) This program change is an increase to develop and implement a centralized paid internship program to strengthen talent and workforce acquisition. This paid internship program will focus on expanding federal work experience opportunities for underrepresented and underserved populations. This investment includes \$3.6 million in payroll.
- (+\$3,214.0 / +5.0 FTE) This program change is an increase to support the implementation Executive Order 14035 Diversity, Equity, Inclusion, and Accessibility (DEIA) in the Federal Workforce and taking the actions identified in EPA's DEIA Strategic Plan. This investment includes \$859.0 thousand in payroll.
- (+\$1,000.0) This program change is an increase to support the establishment of a Senior Executive Service Candidate Development Program with a goal that EPA senior leaders reflect the diversity of the American people and will include a special focus on developing diversity, equity, accessibility, and inclusivity competencies.
- (+\$1,571.0 / +5.2 FTE) This program change is an increase in support of the Foundations for Evidence-Based Policymaking Act of 2018. Resources will be used for Learning Agenda's evidence-gathering activities. This investment includes \$893.0 thousand in payroll.

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³⁷⁵ For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/memorandum-on-restoring-trust-in-government-through-scientific-integrity-and-evidence-based-policymaking/.

• (+\$6,180.0 / +18.5 FTE) This program change strengthens agencywide capacity to quickly increase staff levels in key offices and programs (i.e., environmental justice, climate, infrastructure programs, etc.). This investment includes \$3.177 million in payroll.

Statutory Authority:

Title 5 of the U.S.C.; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Pesticides Licensing

Science Policy and Biotechnology

Program Area: Pesticides Licensing Goal: Ensure Safety of Chemicals for People and the Environment Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$1,287	\$1,546	\$1,580	\$34
Total Budget Authority	\$1,287	\$1,546	\$1,580	\$34
Total Workyears	4.1	4.6	4.6	0.0

Program Project Description:

The Science Policy and Biotechnology Program provides scientific and policy expertise, coordinates EPA's intra/interagency efforts, and facilitates information-sharing related to core science policy issues concerning pesticides and toxic chemicals. Many offices within EPA regularly address cutting-edge scientific issues. Coordination among affected EPA programs including but not limited to air, pesticides, toxic substances, water, and research and development allows for coherent and consistent scientific policy from a broad Agency perspective. In addition, the Science Policy and Biotechnology Program provides for independent, external scientific peer review, primarily through two federal advisory committees: the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel (FIFRA SAP), and the Science Advisory Committee on Chemicals (SACC).

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the FY 2022 – 2026 EPA Strategic Plan.

In FY 2023, the Science Policy and Biotechnology Program continues its peer review role to evaluate the scientific and technical issues associated with chemical safety and biotechnology. In addition, other science policy and biotechnology issues will be supported by the Program when decisions require expert scientific advice from an independent scientific peer review panel.

FIFRA Scientific Advisory Panel

The FIFRA SAP, operating under the rules and regulations of the Federal Advisory Committee Act, will continue to serve as the primary external independent scientific peer review mechanism for EPA's pesticide programs. As the Nation's primary pesticide regulatory agency, EPA makes decisions that require EPA to review scientific data on pesticide risks to wildlife, farm workers, pesticide applicators, sensitive populations, and the general public. The scientific data involved in these decisions are complex, and a critical component of EPA's use of the best available science to address such issues is seeking technical advice and scientific peer review from the FIFRA SAP.

The FIFRA SAP conducts reviews each year on a variety of scientific topics. Specific topics to be placed on the SAP agenda are usually confirmed in advance of each session and include difficult, new, or controversial scientific issues identified in the course of EPA's pesticide program activities. In FY 2021, EPA addressed expired membership terms on the FIFRA SAP. EPA appointed two new members and reappointed the recent Chair and one recent member. In FY 2022, EPA initiated the selection process for those members whose terms expire in FY 2023. EPA does not plan to conduct any FIFRA SAP meetings in FY2022. Based on the committee's objectives and scope of activities, the FIFRA SAP anticipates holding approximately 5 meetings in FY 2023. These meetings will focus on the impact of pesticides on health and the environment and include the peer review of scientific data, methodologies, models, and assessments, as needed.

Science Advisory Committee on Chemicals

The SACC, operating under the rules and regulations of the Federal Advisory Committee Act, will continue to serve as the primary external independent scientific peer review mechanism for EPA's chemical safety programs. EPA makes decisions that require the Agency to review scientific data on risks that chemicals pose to a variety of populations including women, children, and other potentially exposed or susceptible subpopulations. The scientific data, assessments, methodologies, and measures involved in these decisions are complex. Many of EPA's tools and models for examining exposures to industrial chemicals rely on inputs that are sensitive to climate data. The SACC provides independent, expert scientific advice and recommendations to EPA on the scientific basis for risk assessments, methodologies, and pollution prevention measures and approaches for chemicals regulated under the Toxic Substances Control Act (TSCA) and also is a critical component of EPA's use of the best available science.

The SACC conducts reviews each year on a variety of scientific topics. Similar to the FIFRA SAP, specific topics to be placed on the SACC agenda include difficult, new, or controversial scientific issues identified in the course of EPA's chemicals program activities. In FY 2021, EPA addressed expired membership terms on the SACC. EPA appointed nine new members and reappointed seven recent members. In FY 2022, EPA plans to initiate the selection process for those members whose terms expire in FY 2023. By the end of the second quarter of FY 2022, EPA has held one SACC meeting and plans to hold a second SACC meeting in the third quarter of FY 2022. Based on the committee's objectives and scope of activities, the SACC anticipates holding approximately 4 to 6 meetings in FY 2023. These meetings will focus on the impact of industrial chemicals on human health and the environment and include the peer review of scientific data, methodologies, models, and assessments, as needed.

Planned Committee Meetings

Based on the estimates reflected in the 2020-2022 committee charters,³⁷⁶ the FIFRA SAP and SACC anticipate holding a total of nine to 11 meetings in FY 2023. These meetings will focus on the impact of pesticides and chemicals on human health and the environment and include the peer review of scientific data, methodologies, models, and assessments, as needed.

³⁷⁶ For additional information, please visit: https://www.epa.gov/sap/fifra-scientific-advisory-panel-charter and https://www.epa.gov/tsca-peer-review/science-advisory-committee-chemicals-charter.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$140.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$106.0) This change is the result of savings realized by the program's introduction and increased use of virtual meetings.

Statutory Authority:

Federal Insecticide Fungicide and Rodenticide Act (FIFRA); Federal Food, Drug and Cosmetics Act (FFDCA), §408; Toxic Substances Control Act (TSCA); Federal Advisory Committee Act (FACA).

Pesticides: Protect Human Health from Pesticide Risk

Program Area: Pesticides Licensing
Goal: Ensure Safety of Chemicals for People and the Environment
Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$58,124	\$60,181	\$62,726	\$2,545
Science & Technology	\$2,431	\$2,803	\$2,917	\$114
Total Budget Authority	\$60,555	\$62,984	\$65,643	\$2,659
Total Workyears	434.3	385.6	385.6	0.0

Total program work years in FY 2023 include 82.1 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

Program Project Description:

Under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)³⁷⁷ and the Federal Food, Drug, and Cosmetic Act (FFDCA), as amended by the Food Quality Protection Act of 1996 (FQPA) and the Pesticide Registration Improvement Extension Act of 2018 (PRIA 4),³⁷⁸ EPA is charged with protecting people from the health risks that pesticide use can pose. FIFRA requires EPA to register pesticide products before they are marketed for use in the U.S. Registration is based on the review of scientific data sufficient to demonstrate that the product can perform its intended function without unreasonable adverse effects on people or the environment. This program emphasizes the use of reduced risk methods of pest control, including the use of reduced risk pesticides and helping growers and other pesticide users learn about new, safer products and methods of using pesticides.

Under FFDCA, if a pesticide is to be used in a manner that may result in pesticide residues in food or animal feed, EPA must establish a tolerance, or maximum legal residue level, or an exemption from the requirement of a tolerance, before it can be registered. To establish a tolerance, EPA must find that the residues are "safe," which, under FFDCA, means that there is a reasonable certainty of no harm to human health from aggregate exposure to the pesticide residue in food and from all other exposure except occupational exposure. ³⁷⁹ EPA must periodically review the registration and tolerances that the Agency issues to ensure that public health is adequately protected.

³⁷⁷ For additional information on FIFRA, please visit: https://www.epa.gov/laws-regulations/summary-federal-insecticide-fungicide-and-rodenticide-act.

³⁷⁸ On Friday, March 8, 2019, Pesticide Registration Improvement Extension Act of 2018 (PRIA 4) was signed into law, which

³⁷⁸ On Friday, March 8, 2019, Pesticide Registration Improvement Extension Act of 2018 (PRIA 4) was signed into law, which reauthorizes PRIA for 5 years through fiscal year 2023, and updates the fee collection provisions of the Federal Insecticide, Fungicide, and Rodenticide Act.

³⁷⁹ Additional information related to pesticide registration, the setting of tolerance levels, and the pesticide risk assessment process can be found at the following location: https://www.epa.gov/pesticide-tolerances/setting-tolerances-pesticide-residues-foods.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the FY 2022 – 2026 EPA Strategic Plan.

Pesticide Review and Registration

In FY 2023, EPA will continue to review and register new pesticides, new uses for existing pesticides, and other registration requests in accordance with statutory requirements, making sure exposure to infants and children is reflected in the human health risk assessments supporting these regulatory determinations. Many assessments also address potential exposure to pregnant women. In addition, the Agency will evaluate pesticides that are already in the market against current scientific standards for human health. To advance EPA's work supporting environmental justice (EJ) and children's health, EPA also will evaluate these registration requests with special consideration for impacts on members of overburdened communities and sensitive life stages, especially infants and children. Under the FQPA, EPA is statutorily required to ensure that its regulatory decisions are protective of children's health and other vulnerable subpopulations. EPA also will continue to emphasize the registration of reduced risk pesticides, including biopesticides, to provide farmers and other pesticide users with new, safer alternatives. The Agency, in collaboration with the U.S. Department of Agriculture (USDA), also will work to ensure that minor use registrations receive appropriate support and that needs are met for reduced risk pesticides for minor use crops. EPA also will assist farmers and other pesticide users in learning about new, safer products and methods of using existing products through workshops, demonstrations, small grants, and materials on the website and in print.

In FY 2023, EPA also will continue to review the registrations of existing pesticides with a focus on assessing and ensuring that pesticides are used safely, without unreasonable adverse effects to human health and the environment. The goal of the registration review process, as mandated by statute, is to review pesticide registrations every 15 years to determine whether they continue to meet the FIFRA standard for registration. For pesticides registered before October 1, 2007, EPA is required to make registration review decisions by October 1, 2022. EPA has completed opening dockets for all 726 cases in registration review. EPA will focus its FY 2023 resources on completing decisions for cases that are not completed by the FY 2022 statutory deadline and on cases with 15-year due dates in FY 2023 and beyond. Through FY 2021, EPA has completed a total of 676 draft risk assessments and 556 final or interim decisions, with 50 draft risk assessments and 170 final or interim decisions remaining to be completed to meet the FY 2022 statutory deadline.

EPA fell short of the FY 2021 target of 110 decisions completed through pesticides registration review. As EPA approaches the October 1, 2022 deadline, many of the remaining cases involve highly complex scientific and regulatory issues, which have resulted in requests from stakeholders to extend the comment periods for proposed decisions, lengthening the amount of time needed to complete the necessary reviews. In addition, EPA continues to await data and/or registrant input critical to finalizing several registration review decisions. Further ongoing challenges in meeting the FY 2022 deadline included delayed registrant submittal of additional data, the need for interand intra-agency coordination, and resource constraints.

³⁸⁰ For additional information please visit the EPA Pesticide Registration Internet site: https://www.epa.gov/pesticide-registration.

In FY 2023, EPA will continue enhancements to the Pesticide Registration Information System (PRISM). Expanding the capabilities of PRISM by integrating more of EPA's regulatory workflow into a single system will reduce paperwork burden and maximize efficiency, in accordance with the President's Management Agenda (PMA), by converting paper-based processes into electronic processes and corresponding workflows for the Pesticide Program's regulated entities. In addition, PRISM will create an iterative/inclusive, streamlined electronic workflow to support pesticide product registration, chemical reviews, and assessments, and will be used as a centralized data repository to electronically store associated data as they relate to regulatory decisions and scientific information. Overall, the Agency projects that expanding PRISM and related projects will improve over 150 existing business process workflows supporting the implementation of PRIA. This digital transformation will consolidate over 30 different custom-built systems into a single platform to track registration or re-registration of a chemical from the moment EPA receives a case to the final regulatory decision. Being able to track all reviews in a single system will eliminate the need for hundreds of spreadsheets or Access databases that are currently used to track work at a team, branch, divisional or office level. This transformation focuses on improving the employee's experience only and not on the customer experience which will be the focus beyond FY 2023.

Reducing Pesticide Risks to People through the Registration of Lower Risk Pesticides

In FY 2023, EPA will continue to promote reduced-risk pesticides by giving registration priority to pesticides that have lower toxicity to humans and non-target organisms such as birds, fish, and plants; low potential for contaminating groundwater; lower use rates; low pest resistance potential; and compatibility with Integrated Pest Management (IPM). Several other countries and international organizations also have instituted programs to facilitate registering reduced-risk pesticides. EPA works with the international scientific community and the Organization for Economic Cooperation and Development (OECD) member countries to register new reduced-risk pesticides and to establish related tolerances (maximum residue limits). Through these efforts, EPA will help reduce risks to Americans from foods imported from other countries.

Protecting Workers from On-the-Job Pesticide Risks

Millions of America's workers are exposed to pesticides in occupations such as agriculture, lawn care, food preparation, and landscape maintenance. A very large proportion of these workers are members of communities with EJ concerns. EPA's work in this area will be guided by Executive Order (EO)13985: Advancing Racial Equity and Support for Underserved Communities Through the Federal Government and, where regulatory action is taken, by the Agency's Guidance on Considering Environmental Justice During the Development of an Action³⁸² and its companion Technical Guidance for Assessing Environmental Justice in Regulatory Analysis. Protecting pesticide applicators, handlers and agricultural workers from potential effects of pesticides is an important role of the Pesticide Program. Pesticide handlers in a number of sectors may be exposed to pesticides when they prepare pesticides for use, such as by mixing a concentrate with water or loading and applying the pesticide. In FY 2023, EPA will continue to support the implementation

³⁸¹For more information, please see: https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/overview-risk-assessment-pesticide-program. Please also see EPA's IPM website: https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles#for more-information.

³⁸² For more information, please see: https://www.epa.gov/environmentaljustice/guidance-considering-environmental-justice-during-development-action.

³⁸³ For more information, please see: https://www.epa.gov/environmentaljustice/technical-guidance-assessing-environmentaljustice-regulatory-analysis.

of the Agricultural Worker Protection Standard (WPS)384 and the Certification of Pesticide Applicators (CPA)³⁸⁵ regulations through education and outreach, guidance development, and grant programs. Efforts to implement the WPS include addressing EJ issues in rural communities, especially by considering farmworkers and their families. Programs include National Farmworker Pesticide Safety Training and development of pesticide educational resources and training targeted toward agricultural workers and pesticide handlers. Efforts include addressing the education needs of the target audience to ensure trainings are effective and in the appropriate cultural context. EPA also will continue outreach and training to healthcare providers in the recognition and management of pesticide-related illnesses. Outreach will focus on training health care providers serving the migrant and seasonal farmworker community, further improving the treatment of agricultural workers and rural communities potentially exposed to pesticides. Support also will include efforts to improve reporting of occupation-related pesticide incidents. In addition, EPA will continue to support the development of resources, training, and educational forums for applicators, including the development of a virtual pesticide training for certification of private applicators in Indian Country covered under the EPA-administered plan to meet the requirements of using restricted use pesticides in agriculture.

Implementation of the CPA also includes continued support of state Pesticide Safety Education Programs, which play a crucial role in training and certifying pesticide handlers in proper pesticide use, thereby enabling the handlers to protect themselves and other workers, as well as the public and the environment. In FY 2023, EPA will focus on implementation of amended state, tribal, and federal certification programs based on the 2017 CPA rule. EPA will support that effort by providing technical assistance for updates to state/tribal applicator training materials including manuals, exams, and other recertification materials to meet the revised Part 171 rule requirements.

Preventing Disease through Public Health Pesticides: Antimicrobial Testing

In reviewing registrations for antimicrobials, EPA is required to ensure that antimicrobials maintain their effectiveness. BPA's Antimicrobial Testing Program (ATP) has been testing hospital sterilants, disinfectants, and tuberculocides since 1991 to help ensure that products in the marketplace meet stringent efficacy standards. EPA is currently in the process of developing a new risk-based testing strategy in response to EPA Office of the Inspector General (OIG) recommendations made in FY 2016. Consistent with the OIG recommendations, EPA suspended the ATP in November 2017 and released a draft risk-based strategy, renamed the Antimicrobial Performance Evaluation Program (APEP), in October 2019 for public comment and will continue to seek public input prior to implementation in FY 2023.

COVID Response

In FY 2023, EPA will continue to review registration requests for new surface and air disinfectants for SARS-CoV-2 as necessary via the standard registration process and associated deadlines required by FIFRA. EPA also will continue to update List N, which is a list of registered disinfectants for use against SARS-CoV-2.

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³⁸⁴ For more information, please see: https://www.epa.gov/pesticide-worker-safety/agricultural-worker-protection-standard-wps.

³⁸⁵ For additional information, please visit: https://www.epa.gov/pesticide-worker-safety/revised-certification-standards-pesticide-applicators

pesticide-applicators.

386 Please see FIFRA section 3(h)(3), 7 U.S.C. 136a(h)(3).

³⁸⁷ For additional information, please visit: https://www.epa.gov/pesticide-registration/antimicrobial-testing-program.

General Pesticide Outreach and Education

In FY 2023, the Pesticide Program will continue environmental education and training efforts for growers, pesticide applicators, and workers, as well as the public in general. Giving priority to reduced risk and Integrated Pest Management (IPM) friendly pesticides are two steps toward protecting human health. Also, the Pesticide Safety Education Program provides education through training and is a key component to the implementation of applicator certification programs across the nation, including on tribal lands and along the US-Mexico border, and helps ensure pesticides are used in a manner to protect human health and the environment. In addition, EPA will continue to make information easily accessible to the public and pesticide users, update safety information on pesticides, support the National Pesticide Information Center³⁸⁸ that provides a bilingual hotline for pesticide information and develop outreach materials for the public and incident reporting.

Tribal Pesticide Program Council (TPPC)

The Pesticide Program also will continue to manage the Tribal Pesticide Program Council (TPPC) cooperative agreement. This national partnership group was formed in 1999 as a forum for tribes and Alaska Native Villages to work with EPA to address pesticide issues and concerns. The TPPC also provides a forum for tribes and Alaska Native Villages to provide input in developing policies that would strengthen their pesticide programs, provide guidance for tribes that do not have such programs, and provide networking opportunities and support for tribal pesticide regulators. In FY 2023, EPA will work with the TPPC to identify concerns related to EJ and climate change that EPA can begin to address.

Reducing Animal Testing

In FY 2023, the Agency will continue to use its guiding principles on data needs³⁸⁹ to ensure that it has sufficient information to support strong regulatory decisions to protect human health, while reducing and, in some cases, eliminating unnecessary animal testing. EPA's Hazard and Science Policy Council (HASPOC) plays an important role in the implementation of the vision of the 2007 National Academy of Sciences (NAS) report on toxicity testing in the 21st Century—which recommended moving toward smarter testing strategies by waiving human health toxicity studies that do not provide useful information. Since its inception, HASPOC has waived hundreds of studies resulting in the saving of tens of thousands of animals and tens of millions of dollars without compromising the integrity of the science supporting EPA's regulatory decision-making for pesticides. In addition, the Agency will continue to develop and implement 21st Century toxicology and exposure methods, including additional retrospective analysis of the reproductive avian study, development of a waiver framework for carcinogenicity studies, and the use of computer-modeling and in vitro testing techniques for acute oral toxicity, skin and eye irritation, and inhalation toxicity. All of these activities advance more efficient and effective human health risk assessments that support sound, risk-based, regulatory decision-making.

In FY 2023, the Agency will be measuring performance for the second cycle of registration review, tracking intermediate stages such as docket openings, draft risk assessment completion, and final registration review case completions under the 15-year cycle of pesticide registration review. Additionally, EPA will be tracking metrics related to pesticide safety training of farmworkers

³⁸⁸ For additional information, please visit: http://npic.orst.edu/.

³⁸⁹ Additional information on reducing animal testing may be found at: https://www.epa.gov/pesticides/new-epa-guidance-testing-pesticides-will-reduce-animal-testing.

funded through a 5-year cooperative grant; metric details will be provided by the grantee and will capture the number of farmworkers trained and knowledge comprehension based on pre- and post-training assessment.

Performance Measure Targets:

Work under this program supports performance results in the Pesticides: Protect the Environment from Pesticide Risk Program under the EPM appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$2,409.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$136.0) This program change is a rebalancing of resources among the Pesticides programs to increase outreach to overburdened and underserved communities with EJ concerns.

Statutory Authority:

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Federal Food, Drug, and Cosmetic Act (FFDCA) § 408.

Pesticides: Protect the Environment from Pesticide Risk

Program Area: Pesticides Licensing Goal: Ensure Safety of Chemicals for People and the Environment Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$36,714	\$39,543	\$45,876	\$6,333
Science & Technology	\$1,805	\$2,207	\$2,252	\$45
Total Budget Authority	\$38,519	\$41,750	\$48,128	\$6,378
Total Workyears	322.1	249.6	259.6	10.0

Total program work years in FY 2023 include 53.2 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

Program Project Description:

The goal of this program, authorized under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), is to protect the environment from the potential risks posed by pesticide use. To achieve this goal, EPA must conduct risk assessments before the initial registration of each pesticide for each use, as well as re-evaluate each pesticide at least every 15 years, as required by the Food Quality Protection Act (FQPA). This periodic review is accomplished through EPA's Pesticide Registration Review Program. ³⁹⁰ In addition to FIFRA responsibilities, the Agency has distinct obligations under the Endangered Species Act (ESA), ³⁹¹ which include ensuring that pesticide regulatory decisions will not destroy or adversely modify designated critical habitat or jeopardize the continued existence of species listed as threatened or endangered by the U.S. Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS) (jointly, "the Services").

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the FY 2022 - 2026 EPA Strategic Plan.

Assessing the Risks Pesticides Pose to the Environment

To accomplish the goals set out in the FIFRA, in FY 2023, EPA will continue to conduct ecological risk assessments³⁹² to determine what risks are posed by each pesticide to plants, animals, and ecosystems that are not the targets of the pesticide and whether changes are necessary to protect these resources.³⁹³ In FY 2023, EPA will continue to examine all toxicity and environmental fate data submitted with each new pesticide registration application to determine what risks the new

³⁹⁰ FIFRA requires EPA to register a pesticide if, among other things, the product "will also not generally cause unreasonable adverse effects on the environment" when used in accordance with labeling and common practices.

³⁹¹ For additional information, please visit: https://www.epa.gov/endangered-species.

³⁹² For additional information, please visit: https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/factsheet-ecological-risk-assessment-pesticides.

³⁹³ Additional information may be found at: https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/overview-risk-assessment-pesticide-program.

active ingredient may pose to the environment. When complex scientific issues arise, the Agency may solicit external review, such as consultation with the FIFRA Scientific Advisory Panel, ³⁹⁴ for independent scientific advice.

Ensuring Proper Pesticide Use through Labeling

In FY 2023, EPA will continue to use pesticide labels to indicate what uses are appropriate and to ensure that the pesticide is used at the application rates and according to the methods and timing approved.³⁹⁵

Pesticide Registration Review

In FY 2023, EPA's activities will involve increased efforts on comprehensive risk assessments to protect the environment. For pesticides registered before October 1, 2007, EPA is required to make registration review decisions by October 1, 2022. EPA has completed opening dockets for all 726 cases in registration review. EPA will focus its FY 2023 resources on completing decisions for cases that are not completed by the FY 2022 statutory deadline and on cases with 15-year due dates in FY 2023 and beyond. Through FY 2021, EPA has completed a total of 676 draft risk assessments and 556 final or interim decisions, with 50 draft risk assessments and 170 final or interim decisions remaining to be completed to meet the FY 2022 statutory deadline.

EPA fell short of the FY 2021 target of 110 decisions completed through pesticides registration review. As EPA approaches the October 1, 2022, deadline, many of the remaining cases involve highly complex scientific and regulatory issues, which has resulted in requests from stakeholders to extend the comment periods for proposed decisions, lengthening the amount of time needed to complete the necessary reviews. In addition, EPA continues to await data and/or registrant input critical to finalizing several registration review decisions. Further ongoing challenges in meeting the FY 2022 deadline include delayed registrant submittal of additional data, and the need for interand intra-agency coordination, and resource constraints.

Pesticide Registration and Risk Reduction Through the Use of Safer Pesticides and Methods EPA has promoted reduced risk pesticides since 1993 by giving registration priority to pesticides that have lower toxicity to people and non-target organisms such as birds, fish, and plants; low potential for contaminating groundwater; lower use rates; low pest resistance potential; and compatibility with Integrated Pest Management (IPM). ^{396,397} In FY 2023, EPA will continue to assist pesticide users in learning about new, safer products as well as safer methods for using existing products. Through its Center for IPM, educational webinars, science-based publications, informational social media outreach, and collaborations with federal partners, states, commodity

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³⁹⁴ For additional information, please visit: https://www.epa.gov/sap.

<u>program.</u>
³⁹⁷ For additional information on IPM, please visit: <u>https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles.</u>

and other non-governmental organizations, the Agency also will encourage the use of IPM tools, biological pesticides and biotechnology, where they present lower-risk solutions to pest problems.

Reducing Animal Testing

In FY 2023, EPA will continue its efforts to promote the use of alternative methods to whole animal toxicity testing for characterizing the effects of pesticide active ingredients on terrestrial and aquatic vertebrates. EPA also will continue its partnership with the National Toxicology Program Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM). A focus area will be the use of Collaborative Acute Toxicity Modeling Suite (CATMoS) estimates of acute oral toxicity to replace mammal testing in ecological risk assessment. EPA also will complete a study of the feasibility of reducing the number of tested species of fish used to characterize acute effects for the taxa. This effort is expected to complement EPA's work with other federal agencies to collect, describe, and develop performance-based evaluations for a suite of in-silico and in-vitro methods for estimating acute lethal endpoints in fish. By addressing both the endpoint needs and the available estimation tools concurrently, EPA expects to increase the efficiency of performance evaluation and narrow the scope of needed estimation methods for consideration, thereby expediting the acceptance process. Additionally, through stakeholder discussions and participation in intergovernmental working groups, the Agency will work to identify opportunities to reduce the use of animals in ecological hazard testing. EPA also will reach out to non-governmental organizations to collaborate on projects (e.g., to retrospectively analyze the results of ecological hazard testing). Based on the results of those projects, EPA will then develop and disseminate guidance materials for companies to clarify ecotoxicology testing requirements/needs.

Minimizing Environmental Impacts through Outreach and Education

Through public outreach, the Agency will continue to encourage the use of IPM and other practices to maximize the benefits pesticides can yield while minimizing their impacts on the environment. As a continued requirement of the Office of Chemical Safety and Pollution Prevention's National Program Guidance, regional pesticide offices will initiate specific IPM-related projects that target disadvantaged, overburdened or underserved communities, or vulnerable populations, such as children attending preschools and tribal schools. The Agency also will develop and disseminate pesticide safety brochures, videos, links, and webinars which provide education on potential benefits of IPM, and promote outreach through its Center for IPM on the success of IPM to encourage its use. To encourage responsible pesticide use that does not endanger the environment, EPA also will reach out to the public through its website and social media accounts, and to workers and professional pesticide applicators through worker training programs. The Pesticide Safety Education Program provides education to professional pesticide applicators through training and is a key component to the implementation of applicator certification programs across the nation and helps ensure pesticides are used in a manner to protect human health and the environment.

Protection of Endangered Species

EPA is responsible for complying with the Endangered Species Act (ESA) and for ensuring that federally endangered and threatened species are not harmed from exposure when it registers

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³⁹⁸ For additional information, please visit: https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles.

³⁹⁹ For additional information, please visit: https://www.epa.gov/pesticide-worker-safety/pesticide-safety-education-programs-0.

pesticides. This presents a great challenge given that there are approximately 1,200 active ingredients in more than 17,000 pesticide products—many of which have multiple uses. Endangered species risk assessments are extraordinarily complex, national in scope, and involve comprehensive evaluations that consider risks to over 1,600 listed endangered species and 800 designated critical habitats in the U.S. with diverse biological attributes, habitat requirements, and geographic ranges. Given the complexity of evaluating potential effects to diverse listed species, EPA has been unable to perform ESA evaluations for the vast majority of its actions, which has resulted in numerous successful litigation challenges for registration and registration review actions.

In January 2022, EPA announced a new policy whereby all new active ingredient registrations will only be registered under conditions that comply with ESA. To support this action and incrementally integrate ESA mandates into the pesticide registration process, EPA requests an additional \$4.9 million and 10 FTE for the Pesticide Program in FY 2023. These resources will support the Program in its efforts to begin making progress towards conducting risk assessments and making risk management decisions which protect federally threatened and endangered species from exposure to new active ingredients, in accordance with ESA mandates.

In FY 2023, the Agency also will assess whether listed endangered or threatened species or their designated critical habitat may be affected by use of pesticide products in a manner described in reports to Congress. 401 Where risks are identified in a biological evaluation, EPA also will work with the Services in a consultation 402 process to ensure these new or existing pesticide registrations also meet the ESA standard. 403 EPA also will continue to develop processes to protect listed species earlier in the regulatory and consultation processes as resources allow.

During registration review, EPA also will support obtaining risk mitigation earlier in the process by encouraging registrants to agree to changes in uses and applications of a pesticide that help protect endangered species prior to completion of EPA's consultations with the Services. In FY 2023, pesticide registration reviews are expected to contain environmental assessments. Selected assessments also will evaluate potential endangered species impacts. These efforts will continue to expand the Program's workload due to the need to conduct additional environmental assessments and identify, evaluate, and implement potential mitigations for listed species.

In FY 2023, in cooperation with the Services and the U.S. Department of Agriculture (USDA), the Agency will continue to implement its duties under the ESA. EPA also will continue to work with the Services and USDA to improve the Biological Evaluation methodology to inform the consultation process and will apply appropriate methods to selected pesticide risk assessments. The Agency will continue to provide technical support for compliance with the requirements of the ESA. In FY 2023, EPA also will continue the advancement and integration of state-of-the-art

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⁴⁰⁰ For additional information, please visit: https://www.epa.gov/newsreleases/epa-announces-endangered-species-act-protection-policy-new-pesticides.

⁴⁰¹ For additional information, please visit: https://www.epa.gov/endangered-species/reports-congress-improving-consultation-process-under-endangered-species-act.

⁴⁰² For additional information, please visit: https://www.epa.gov/endangered-species/assessing-pesticides-under-endangered-species-act.

species-act.
403 Additional information on how EPA protects endangered species from pesticides can be found at: https://www.epa.gov/endangered-species.

science models, knowledge bases, and analytic processes to increase productivity and better address the challenge of potential risks of specific pesticides to specific species. Interconnection of the various databases within the Program also will provide improved support to the risk assessment process during registration review by allowing risk assessors to analyze complex scenarios more easily regarding endangered species. EPA also will continue to improve its system used to implement spatially explicit protections for listed species, Bulletins Live! Two (BLT). 404 EPA plans to continue to solicit and receive feedback on the usability of BLT, maintain and improve the underlying data, and enhance the usability of the system based on feedback as more bulletins continue to be created and released as part of registration and registration review decisions.

Pollinator Protection

Bees and other pollinators play a critical role in ensuring the production of food. USDA is leading the federal government's effort to understand the causes of declining pollinator health and identify actions that will improve pollinator health. EPA is part of this effort and is focusing on the potential role of pesticides while ensuring that the pesticides used represent acceptable risks to pollinators and that products are available for commercial beekeepers to manage pests that impact pollinator health.

EPA continues to carefully evaluate potential effects that pesticides may have on bees through the registration of new active ingredients and registration review, in cooperation with the Government of Canada and the California Department of Pesticide Regulation. EPA is continuing to work with USDA to identify and address factors associated with declines in pollinator health. EPA also has been working with a wide range of stakeholders in the government and private sectors, both domestically and internationally, to develop and implement strategies to address factors associated with pollinator declines and to ensure that the best available science serves as a foundation for regulatory decisions. In FY 2023, EPA also will continue to apply the best available science and risk management methods to reduce potential exposures to pollinators from pesticides. 405

Protection of Water Resources

Reduced concentration of pesticides in water sources is an indication of the effectiveness of EPA's risk assessment, management, mitigation, and communication activities. In FY 2023, the Agency also will continue to evaluate monitoring data as it prepares aquatic exposure assessments and will continue to apply risk management measures, when appropriate, to reduce pesticide loadings in water. EPA also will update aquatic benchmarks so that states and other stakeholders can determine if measured pesticide levels might impact aquatic life. Water quality is a critical endpoint for measuring exposure and risk to the environment and a key factor in assessing EPA's ability to reduce exposure from these key pesticides of concern. 406

Performance Measurement

In FY 2023, the Agency will be measuring performance for the registration review cases with 15year due dates in FY 2023 and beyond, tracking intermediate stages such as docket openings, draft

⁴⁰⁴ For additional information, please visit: https://www.epa.gov/endangered-species/bulletins-live-two-blt-tutorial.

⁴⁰⁵ Additional actions EPA is taking to protect pollinators from pesticides can be found at: https://www.epa.gov/pollinator-

<u>protection.</u>
406 The most sensitive aquatic benchmarks for the chemicals are posted on the website: http://www.epa.gov/pesticide-science- and-assessing-pesticide-risks/aquatic-life-benchmarks-pesticide-registration.

risk assessment completion, and final registration review case completions under the 15-year cycle of pesticide registration review. The Agency expects to improve protections to endangered species by increasing the percentage of new active ingredient registrations and registration review risk assessments that incorporate considerations of threatened and endangered species and leverage those improvements for other related processes in subsequent years (e.g., new uses). Additionally, EPA will be tracking metrics related to pesticide safety training of farmworkers funded through a 5-year cooperative grant; metric details will be provided by the grantee and will capture the number of farmworkers trained and knowledge comprehension based on pre- and post-training assessment.

Performance Measure Targets:

(PM FIFRA3a) Number of pesticide registration review cases completed	FY 2022	FY 2023
with statutory due dates that fall after October 1, 2022.	Target	Target
	15	20
(PM FIFRA3b) Number of pesticide registration review dockets opened for	FY 2022	FY 2023
registration review cases with statutory completion dates that fall after	Target	Target
October 1, 2022.	25	27
(PM FIFRA3c) Number of draft risk assessments completed for pesticide	FY 2022	FY 2023
registration review cases with statutory completion dates that fall after	Target	Target
October 1, 2022.	9	21
(PM ESA1) Percentage of risk assessments supporting pesticide registration	FY 2022	FY 2023
decisions for new active ingredients that consider the effects determinations	Target	Target
or protections for federally threatened and endangered species.	40	50
(PM ESA2) Percentage of risk assessments supporting pesticide registration	FY 2022	FY 2023
review decisions that include effects determinations or protections of	Target	Target
federally threatened and endangered species.	20	30
(PM WPS1a) Number of farmworkers receiving EPA-supported WPS	FY 2022	FY 2023
pesticide safety training.	Target	Target
	20,000	20,000
(PM WPS1b) Percentage of content knowledge learned by	FY 2022	FY 2023
farmworker/trainees upon completion of EPA-supported WPS pesticide	Target	Target
training.	95	95

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$1,662.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$4,928.0 / +10.0 FTE) This program change will enable the Pesticide programs to begin to fully comply with the Endangered Species Act. Resources will support the program to incrementally address ESA mandates in pesticide risk assessments and making risk management decisions that protect federally threatened and endangered species from exposure to new active ingredients. This investment also includes \$1.818 million in payroll.

• (-\$257.0) This program change is a rebalancing of resources among the Pesticides programs to increase outreach to communities with EJ concerns under the Pesticides: Protection of Human Health Program.

Statutory Authority:

Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); Endangered Species Act (ESA).

Pesticides: Realize the Value of Pesticide Availability

Program Area: Pesticides Licensing Goal: Ensure Safety of Chemicals for People and the Environment Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$6,034	\$7,730	\$7,979	\$249
Science & Technology	\$645	\$876	\$984	\$108
Total Budget Authority	\$6,680	\$8,606	\$8,963	\$357
Total Workyears	35.3	35.8	35.8	0.0

Program Project Description:

This program seeks to realize the value of pesticides that can be used safely to yield many benefits, such as killing viruses and bacteria in America's hospitals. These benefits also include guarding the Nation's abundant food supply, protecting the public from disease-carrying pests, and protecting the environment from the introduction of invasive species from other parts of the world. In fulfilling its mission, the Program manages the following types of pesticide registrations and regulatory actions under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA):⁴⁰⁷

- Special Local Needs under FIFRA Section 24(c);
- Federal registrations at the national level under FIFRA Section 3;
- Experimental Use Permit Section 5;
- Emergency, Quarantine, and Crisis Exemption Section 18; and
- Periodic review of existing chemicals under the Registration Review Program. 408

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the FY 2022 - 2026 EPA Strategic Plan.

Meeting Agriculture's Need for Safe, Effective Pest Control Products

With the passage of the Food Quality Protection Act (FQPA), Congress acknowledged the importance of and need for "reduced-risk pesticides" and supported expedited agency review to

⁴⁰⁷ The primary federal law that governs how EPA oversees pesticide manufacture, distribution, and use in the United States is the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Originally enacted in 1947, FIFRA has been significantly amended several times, including by the Food Quality Protection Act of 1996 (FQPA) and the Pesticide Registration Improvement Extension Act of 2018 (PRIA). FIFRA requires that EPA register pesticides based on a finding that they will not cause unreasonable adverse effects to people and the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide.

⁴⁰⁸ Additional information may be found here: https://www.epa.gov/pesticide-registration/types-registrations-under-fifra.

help these pesticides reach the market sooner and replace other pesticides of higher risk. 409 In FY 2023, EPA will continue to support and develop procedures and guidelines for expedited review of applications for registration or amendments for reduced risk pesticides.

Registration of Generic Pesticides

FIFRA authorizes EPA to register products that are identical to or substantially similar to already registered products (also known as "me too products"). Applicants for these products may rely on, or cite data already submitted by another registrant. The entry of these new products into the market can cause price reductions resulting from new competition and broader access to products, benefitting farmers and consumers. The Agency will continue to prioritize and review generic registrations consistent with the statutory decision-making schedule. Application submissions for these actions can generally be reviewed in four months. The Agency completed 1,256 "me too" new products and amendments in FY 2021. The Agency expects to complete a similar volume of registrations in FY 2023.

Outreach and Education

The Pesticide Program is invested in outreach and training efforts for people who use pesticides and the public in general. In FY 2023, the Agency will continue to encourage Integrated Pest Management (IPM), which emphasizes minimizing the use of broad-spectrum chemicals and maximizing the use of sanitation, biological controls, and selective methods of application. Providing on-the-ground assistance to our partners EPA's regional offices work with states, tribes, and territories to implement their pesticide programs and carry out IPM projects that inform pesticide users about the pest control options, which pesticides to use, how to use them, and how to maintain the site so pests do not return. In addition, the Pesticide Program and its Center for IPM will provide outreach through webinars on a range of pest management and pollinator protection topics, many of which are of importance in areas with environmental justice (EJ) concerns and tribal communities.

Review and Registration

During FY 2023, EPA will continue to review and register new pesticides and new uses for existing pesticides, and act on other registration requests in accordance with FIFRA and Federal Food, Drug, and Cosmetic Act standards, as well as Pesticide Registration Improvement Extension Act of 2018 (PRIA 4) timeframes. Many of these actions will be for reduced-risk conventional pesticides and biopesticides, which, once registered and used by consumers, will increase societal benefits, including for infants and children as well as susceptible subpopulations. Working together with the affected communities, through IPM and related activities, the Agency plans to accelerate the adoption of lower-risk products. EPA also will continue to support implementation of other IPM-related activities and partner in the development of tools and informational brochures to promote IPM efforts and provide guidance to schools, farmers, other partners, and stakeholders, ensuring that information and communications are accessible by members of communities with EJ concerns.

⁴⁰⁹ The law defines a reduced risk pesticide as one that "may reasonably be expected to accomplish one or more of the following: (1) reduces pesticide risks to human health; (2) reduces pesticide risks to non-target organisms; (3) reduces the potential for contamination of valued, environmental resources, or (4) broadens adoption of Integrated Pest Management (IPM) or makes it more effective."

The Agency's work harmonizing pesticide tolerance levels with our top trade partners will reduce international trade barriers. For FY 2023, EPA will undertake regulatory decisions on an estimated seven new chemicals with food uses. For each of these evaluations, EPA will consider whether there are existing Maximum Residue Levels (MRLs) set by trade partners and whether the science supports harmonizing with those levels in which tolerance harmonization will be a component of a portion of these decisions. Also, during FY 2023, EPA will continue rule-making efforts to improve its crop group system which provides the regulatory definitions for crops which are in inter-state and international commerce. EPA is currently pursuing Phase VI of its proposed revisions to pesticide tolerance crop group regulations.

Emergency, Quarantine, and Crisis Exemptions

In FY 2023, EPA will continue to prioritize emergency exemptions under FIFRA Section 18, which authorizes EPA to allow an unregistered use of a pesticide for a limited time in the event of an emergency, such as a severe pest infestation, public health emergency, or invasive pest species quarantine. The economic benefit of the Section 18 Program to growers is the avoidance of losses incurred in the absence of pesticides exempted under FIFRA's emergency exemption provisions. In addition, exemptions serve as important public health controls to avert pests that may cause significant risk to human health. In FY 2021, the Agency received 76 requests for emergency uses and expects to receive a similar number of requests in FY 2023.

Performance Measurement

In FY 2023, the Agency will be measuring performance for the registration review cases with 15-year due dates in FY 2023 and beyond, tracking intermediate stages such as docket openings, draft risk assessment completion, and final registration review case completions under the 15-year cycle of pesticide registration review. The Agency expects to improve protections to endangered species by increasing the percentage of new active ingredient registrations and registration review risk assessments that incorporate considerations of threatened and endangered species and leverage those improvements for other related processes in subsequent years (e.g., new uses). Additionally, EPA will be tracking metrics related to pesticide safety training of farmworkers funded through a 5-year cooperative grant; metric details will be provided by the grantee and will capture the number of farmworkers trained and knowledge comprehension based on pre- and post-training assessment.

Performance Measure Targets:

Work under this program supports performance results in the Pesticides: Protect the Environment from Pesticide Risk Program under the EPM appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$301.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$52.0) This program change is a rebalancing of resources among the Pesticides programs to increase outreach to overburdened and underserved communities with EJ concerns under the Pesticides: Protection of Human Health Program.

Statutory Authority:

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Federal Food, Drug, and Cosmetic Act (FFDCA) § 408.

Resource Conservation and Recovery Act (RCRA)

RCRA: Corrective Action

Program Area: Resource Conservation and Recovery Act (RCRA)
Goal: Safeguard and Revitalize Communities
Objective(s): Clean Up and Restore Land for Productive Uses and Healthy Communities

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$33,921	\$38,453	\$39,820	\$1,367
Total Budget Authority	\$33,921	\$38,453	\$39,820	\$1,367
Total Workyears	168.9	174.4	174.4	0.0

Program Project Description:

To reduce risks from exposure to hazardous wastes, EPA's Resource Conservation and Recovery Act (RCRA) Corrective Action Program ensures that contaminated facilities subject to RCRA requirements are cleaned up by the responsible party, returns contaminated property to productive use, and keeps costs from being transferred to the taxpayer-funded portion of the Superfund Program. Pursuant to EPA promulgated regulations and administrative orders under RCRA, EPA and authorized states will continue to oversee cleanups conducted by facility owner/operators to ensure that the facilities meet their cleanup obligations and to protect taxpayers from having to pay the bill. Approximately 113 million Americans live within three miles of a RCRA corrective action facility (roughly 35 percent of the U.S. population), 410 and the total area covered by these corrective action sites is approximately 18 million acres. 411

EPA works in close partnership with 44 states and one territory authorized to implement the Corrective Action Program⁴¹² to ensure that cleanups are protective of human health and the environment. The Corrective Action Program allows for the return of properties to beneficial use, which benefits the surrounding communities, reduces liabilities for facilities, and allows facilities to redirect resources to productive activities. The Agency provides program direction, leadership, and support to its state partners. This includes specialized technical and program expertise, policy development for effective program management, national program priority setting, measurement and tracking, training and technical tools, and data collection/management/documentation. In addition, through work-sharing, the Agency serves as lead or support for a significant number of complex and challenging cleanups in both non-authorized and authorized states.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.1, Clean Up and Restore Land for Productive Uses and Healthy Communities in the FY 2022 - 2026 EPA Strategic Plan.

⁴¹⁰ U.S. EPA, Office of Land and Emergency Management 2021. Data collected includes: (1) RCRA CA site information as of the end of FY2020; and (2) population data from the 2015-2019 American Community Survey.

⁴¹¹ Compiled RCRAInfo data.

⁴¹² State implementation of the Corrective Action Program is funded through the STAG Categorical Grant: Hazardous Waste Financial Assistance and matching state contributions.

In FY 2023, the Corrective Action Program will focus its resources on continuing cleanup of approximately 3,924 priority contaminated facilities (the Corrective Action Progress Track), which include highly contaminated and technically challenging sites, and on assessing others to determine whether cleanups are necessary. As of the end of FY 2021, only 40 percent of these facilities have completed final and permanent cleanups, leaving approximately 2,300 facilities still needing oversight and technical support to reach final site-wide cleanup objectives. In FY 2021, EPA approved 146 RCRA corrective action facilities as ready for anticipated use (RAU), bringing the total number of RCRA RAU facilities to 1,789. In addition, in FY 2021 the Program achieved remedy construction at 57 facilities, resulting in a total of 2,836 with remedies constructed, and achieved performance standards attained at 64 facilities, resulting in a total of 1,583 facilities with standards attained. The Program's goals are to control human exposures, control migration of contaminated groundwater, complete final cleanups for the Corrective Action Progress Track facilities, and identify, assess, and clean up additional priority facilities.

In FY 2023, EPA will:

- Continue to make RCRA corrective action sites RAU, ensuring that where possible properties are returned to productive use and human health and the environment are protected into the future.
- Assess its universe of cleanup facilities, priorities, and measures to ensure that resources are focused on addressing those facilities that present risk to human health and the environment by implementing actions to end or reduce these threats.
- Provide technical assistance to authorized states in the areas of site characterization, sampling, remedy selection, reaching final cleanup goals, and long-term stewardship for cleanups with contamination remaining in place in order to support communities at risk from multiple health stressors and/or climate change impacts.
- Prioritize and focus the Program on completing site investigations to identify the most significant threats, establish interim remedies to reduce or eliminate exposure, and select and construct safe, effective long-term remedies that also maintain the economic viability of the operating facility.
- For high priority facilities, perform cleanup work under work-sharing agreements to assist with facilities that have complex issues⁴¹⁴ or special tasks.
- Continue to improve cleanup approaches and share best practices and cleanup innovations 415 to speed up and improve cleanups.

⁴¹³ For more information, please refer to: https://www.epa.gov/hw/lists-facilities-resource-conservation-and-recovery-act-rcra-2020-corrective-action-baseline.

⁴¹⁴ For example, vapor intrusion, wetlands contamination, or extensive groundwater issues.

⁴¹⁵ For more information, please refer to: https://www.epa.gov/hw/toolbox-corrective-action-resource-conservation-and-recovery-act-facilities-investigation-remedy.

- Continue analysis on potential modifications to regulations to clarify the definition of hazardous waste found in RCRA section 1004(5) as it relates to corrective action for releases from solid waste management units.
- Update and maintain RCRAInfo, which is the primary data system that many states rely upon to manage their RCRA permitting, corrective action, and hazardous waste generator programs. RCRAInfo receives data from hazardous waste handlers for the National Biennial RCRA Hazardous Waste Report. The last biennial report in 2019 showed there were 26,284 generators of over 33 million tons of hazardous waste. RCRAInfo provides the only national-level RCRA hazardous waste data and statistics to track the environmental progress of approximately 20,000 hazardous waste units at 6,600 facilities.
- Contribute to efforts ensuring the proper management, disposal, and cleanup of per- and polyfluoroalkyl substances (PFAS).

Performance Measure Targets:

(PM RSRAU) Number of RCRA corrective action facilities made ready for anticipated use.	FY 2022 Target	FY 2023 Target
	114	100
(PM CA5RC) Number of RCRA corrective action facilities with final	FY 2022	FY 2023
remedies constructed.	Target	Target
	55	55

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$1,339.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$28.0) This program change supports RCRA Corrective Action activities including cleanups.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) §§ 3004, 3005, 8001.

RCRA: Waste Management

Program Area: Resource Conservation and Recovery Act (RCRA)
Goal: Safeguard and Revitalize Communities
Objective(s): Reduce Waste and Prevent Environmental Contamination

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$59,769	\$70,465	\$79,743	\$9,278
Hazardous Waste Electronic Manifest System Fund	\$21,498	\$0	\$0	\$0
Total Budget Authority	\$81,267	\$70,465	\$79,743	\$9,278
Total Workyears	286.5	296.8	324.8	28.0

Total workyears in FY 2023 include 11.0 FTE funded by e-Manifest fees.

Program Project Description:

The Resource Conservation and Recovery Act (RCRA) established EPA's role as a federal leader in the conservation and recovery of resources. Under RCRA, EPA sets national standards for managing solid and hazardous wastes and provides federal agencies, state, tribal, and local governments, and industries with technical assistance on solid waste management, resource recovery, and resource conservation. Approximately 60,000 facilities generate and safely manage hazardous waste in the United States. Eighty percent of the U.S. population live within three miles of one of these facilities, making national standards and procedures for managing hazardous wastes a necessity. All

The Waste Management Program safeguards the American people while facilitating commerce by supporting an effective waste management infrastructure. Cradle-to-grave hazardous waste management regulations help ensure safe management practices through the entire process of generation, transportation, recycling, treatment, storage, and final disposal. The Program increases the capacity for proper hazardous waste management in states by providing grant funding and technical support.

The RCRA permitting program serves to protect the millions of people in surrounding communities by facilitating clean closure where applicable and managing permits and other controls to protect human health and the environment for the approximately 6,700 hazardous waste units (*e.g.*, incinerators, landfills, and tanks) located at 1,300 treatment, storage, and disposal permit facilities. ⁴¹⁸ Just as businesses innovate and grow, the waste management challenges they face also evolve; this requires new direction and changes in the federal hazardous waste program through updated regulations, guidance, and other tools.

⁴¹⁶ Memorandum, February 18, 2014, from Industrial Economics to EPA, Re: Analysis to Support Assessment of Economic Impacts and Benefits under RCRA Programs: Key Scoping Assessment, Initial Findings and Summary of Available Data (Section 1), pages 5-11.

⁴¹⁷ U.S. EPA, Office of Solid Waste and Emergency Response Estimate. 2014. Data collected includes: (1) site information as of the end of FY 2011 from RCRAInfo; and (2) census data from the 2007-2011 American Community Survey. ⁴¹⁸ As compiled by RCRAInfo.

EPA directly implements the RCRA Program in Iowa and Alaska and provides leadership, worksharing, and support to the remaining states and territories authorized to implement the permitting program. Additionally, the Toxic Substances Control Act (TSCA) polychlorinated biphenyls (PCB) cleanup and disposal program is implemented under the Waste Management Program to reduce PCB exposure from improper disposal, storage, and spills. The Program reviews and approves PCB cleanup, storage, and disposal activities. This federal authority is not delegated to state programs. PCBs were banned in 1979, but legacy use and contamination still exists, and PCBs can still be released into the environment from poorly maintained hazardous waste sites that contain them.

Maintaining updated permits and controls ensures that facilities: 1) have consistent and protective standards to prevent release; 2) have proper standards for waste management to protect human health, prevent land contamination/degradation; and 3) avoid future cleanups and associated substantial costs. EPA will work with authorized states to ensure that permit decisions, including decisions to issue, renew, or deny permits, reflect the latest technology and standards. EPA also will work with authorized states to ensure that all communities, including those who are marginalized and overburdened, have an equitable opportunity to engage in the permitting process. In FY 2020, EPA and the states implemented the Generator Improvement Rule which updated and modernized the regulations for hazardous waste generators to bring them into the 21st Century.

There continues to be increased public and congressional attention to issues around post-consumer materials management, including plastics, in the environment and EPA's role in addressing them (e.g., ocean plastics, environmental justice concerns in countries to whom the U.S. exports plastics, and the climate impacts of single-use plastics). Marine litter is an increasingly prominent global issue that can negatively affect domestic water quality, tourism, industry, and public health. Some of this marine debris comes from human activity at sea, and it makes its way into our waterways from land, creating a direct link between waste management practices and ocean pollution. The Save Our Seas 2.0 Act, enacted in December 2020, demonstrates bipartisan congressional interest and provides EPA with authority to further act on post-consumer materials management.

The Program also plays a central role in establishing and updating standards for analytical test methods that are used across the country and the world to provide consistent, reliable determinations as to whether waste is hazardous, as well as the presence and extent of hazardous waste in the environment. This work provides the foundation that underlies waste management approaches and ensures that method standards evolve with technology for conducting these analyses.

In addition to overseeing the management of hazardous waste under RCRA Subtitle C, EPA also plays a role in solid waste management under Subtitle D. While much of this area is delegated to the states, EPA is actively working on aspects of coal combustion residuals (CCR) under this area of the law, including the establishment and refinement of appropriate regulations and, as directed by the 2016 Water Infrastructure Improvements for the Nation Act (WIIN Act), developing a new federal permitting program for CCR surface impoundments and landfills. In implementing

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⁴¹⁹ U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service, "Ten Things you should Know about Marine Debris," https://oceanservice.noaa.gov/news/marinedebris/ten-things.html.

⁴²⁰ For additional information, please refer to: https://www.congress.gov/116/plaws/publ224/PLAW-116publ224.pdf.

regulations for CCR, EPA is taking action to ensure that the concerns of nearby communities are addressed in a protective manner.

While the majority of the work is focused on domestic issues, the Program also is responsible for issues related to international movement of wastes. EPA oversees the tracking and management of hazardous waste imports and exports. Most of these movements are for recycling and, thus, are critical to resource conservation. In coordination with other agencies and departments, EPA represents the U.S. Government in numerous international forums concerned with waste issues. This representation is vital to protecting U.S. interests and furthering U.S. policy goals.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.2, Reduce Waste and Prevent Environmental Contamination in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the RCRA Waste Management Program will:

- Provide technical assistance, guidance, tools, and support to regions, states, and tribes regarding the development and implementation of solid waste programs (e.g., the RCRA hazardous waste generator, transporter, treatment, storage, and disposal regulations and implementing guidance; the RCRA non-hazardous waste program; the TSCA PCB disposal and cleanup program; and the hazardous waste import/export program).
- Provide technical and implementation assistance, oversight, and support to facilities that generate, treat, store, recycle, and dispose of hazardous waste.
- Review and approve PCB cleanup, storage, and disposal activities to reduce exposures, particularly in sensitive areas like schools and other public spaces. Issuing PCB approvals is a federal responsibility, non-delegable to states.
- Manage and monitor the RCRA permitting program and ensure the issuance of permit efficiently to achieve program goals. This includes progress towards meeting the Agency's goal of increasing the percentage of permits kept up to date for the approximately 6,700 hazardous waste units (e.g., incinerators, landfills, and tanks) located at 1,300 treatment, storage, and disposal permit facilities.
- Continue analysis of existing regulations to ensure protective standards for managing solid and hazardous waste and PCBs. In FY 2023, this includes assessment of standards related to open burning/open detonation of hazardous waste, PCB cleanup and disposal, and other regulatory amendments to reflect current standards, policies, and practices.
- Manage the hazardous waste import/export notice and consent process in order to make shipping hazardous waste across borders more efficient. Managing hazardous waste imports and exports is a federal responsibility, non-delegable to states.

- Provide technical hazardous waste management assistance to tribes to encourage sustainable practices and reduce exposure to toxins from hazardous waste.
- Directly implement the RCRA Program in unauthorized states, on tribal lands, and other unauthorized portions of state RCRA programs. Issue and update permits, including continuing to improve permitting processes.
- Establish and update standards for analytical test methods that are used across the country and the world to provide consistent, reliable determinations as to whether waste is hazardous, as well as the presence and extent of hazardous waste in the environment.
- Take action as necessary regarding regulations to ensure protective management of CCR. The Agency has promulgated regulations specifying improved management and disposal practices to ensure people and ecosystems are protected. The Agency will continue to work with our stakeholders as we develop and implement regulations, through technical assistance and guidance.
- Implement applicable provisions of the WIIN Act, which enables states to submit state CCR permit programs for EPA approval. The Agency will continue to work closely with state partners to review and make determinations on state programs. Subject to appropriations, EPA will implement a permit program for CCR disposal facilities on tribal lands as well as participating states.
- EPA requests approximately \$7.1 million and 28 FTE to support EPA's CCR permit program. Activities include authorizing and working with authorized states that wish to stand up their own permit program and supporting the regulated community as they work to comply with the requirements of the CCR Program. Additional resources also will support the establishment, effective development, and launch of the federal permitting program. Without this investment, state permit programs may be put in place at a rate of 1-2 per year, needed rulemaking will extend into the future, and facilities will proceed along closure and corrective action paths that may be non-compliant and not protective of human health and the environment.
- As part of an EPA effort to reduce ocean pollution and plastics, the Program will provide technical expertise and funding to support development and implementation of solid waste management systems and infrastructure to help ensure that non-hazardous waste items are appropriately collected, recycled, reused, or properly disposed of to prevent litter from entering waterways from land.

Performance Measure Targets:

(PM HW5) Number of updated permits issued at hazardous waste facilities.	FY 2022 Target	FY 2023 Target
	90	100

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$2,195.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$7,083.0 / +28.0 FTE) This program change is an increase to support the new CCR permit program, including working to authorize or with authorized state CCR programs as well as the establishment, effective development, and launch of the federal permitting program. This investment includes \$5.05 million in payroll.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) §§ 3002, 3004, 3005, 3017; Toxic Substances Control Act (TSCA) § 6. Save our Seas 2.0, 2020, Pub. L. 116-224.

RCRA: Waste Minimization & Recycling

Program Area: Resource Conservation and Recovery Act (RCRA)
Goal: Safeguard and Revitalize Communities
Objective(s): Reduce Waste and Prevent Environmental Contamination

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$8,404	\$9,982	\$10,444	\$462
Total Budget Authority	\$8,404	\$9,982	\$10,444	\$462
Total Workyears	44.2	43.4	43.4	0.0

Program Project Description:

The RCRA Waste Minimization and Recycling Program supports the sustainable management of resources, including managing materials that sustainably promote economic growth, reduce environmental impacts, and advance a circular economy for all.

The U.S. recycling industry provides approximately 680,000 jobs and \$5.5 billion annually in tax revenues and there is opportunity for greater contribution to the economy and environmental protection, as recent data indicate materials worth as much as \$9 billion are thrown away each year. Recycling is an important part of a circular economy, which refers to a system of activities that is restorative to the environment, enables resources to maintain their highest values, and designs out waste. A circular economy approach provides direct, measurable reductions in greenhouse gas emissions, as natural resource extraction and processing make up approximately 50 percent of total global greenhouse gas (GHG) emissions.

Further, living near waste and waste-related facilities can place burdens on communities when waste is not properly managed, which can lead to higher levels of chronic health issues. Communities whose residents are predominantly persons of color, Indigenous, or low-income continue to be disproportionately impacted by high pollution levels, resulting in adverse health and environmental impacts. It is critical to implement materials management strategies that are inclusive of communities with environmental justice concerns as well as pursue innovations that offer the benefits of cleaner processing of materials to all. Recycling is not enough to achieve a circular economy, but it is an important part of addressing climate change, creating jobs, and reducing environmental and social impacts.

As directed by Congress, EPA developed a draft National Recycling Strategy in 2020 to begin to address the challenges facing the recycling system to accelerate the move towards a circular economy both domestically and internationally. The Agency established a National Recycling

⁴²¹ For more information, please refer to: https://www.epa.gov/smm/recycling-economic-information-rei-report.

⁴²² U.N. Environment International Resource Panel, Global Resources Outlook, 2019, p. 8. https://www.resourcepanel.org/reports/global-resources-outlook.

Goal to increase the recycling rate from a rate of 32.1 percent in 2018 to 50 percent by 2030,⁴²³ and finalized and released the National Recycling Strategy on November 15, 2021.⁴²⁴ The National Recycling Strategy is part one of a series of strategies the Agency will be developing to build a stronger, more resilient, and cost-effective recycling system and a circular economy for all. Reducing waste helps alleviate burdens on populations that bear the brunt of poorly run waste management facilities and transfer stations. When applied to critical minerals, a circular economy approach facilitates end-of-life recycling and the recovery of critical minerals in order to support a secure supply chain. Future strategies will focus on plastics, critical minerals and electronics, food waste/organics, textiles, and the built environment (*e.g.*, construction and demolition debris).

Congressional and public interest continues to grow regarding plastics in the environment and EPA's role in addressing them (*e.g.*, ocean plastics, environmental justice concerns in countries to whom the U.S. exports plastics, and the climate impacts of single-use plastics). The Save Our Seas 2.0 Act, ⁴²⁵ enacted in December 2020, demonstrates bipartisan congressional interest and provided EPA with authority to further act on domestic recycling and address plastic waste through new grant programs, studies, and increased federal coordination. Additionally, IIJA provides funding for grants under section 302(a) of the Save Our Seas 2.0 Act as well as education and outreach grants focused on improving material recycling, recovery, and management. The IIJA also establishes new programs focused on battery recycling and directs EPA to develop a model recycling program toolkit, increase coordination and review of federal procurement guidelines, and provide assistance to the educational community to incorporate recycling best practices into curriculum.

The RCRA Waste Minimization and Recycling Program also promotes the efficient management of food as a resource. Reducing food loss and waste means more food for communities, fewer greenhouse gas emissions and climate impacts, and increased economic growth. EPA works to meet the national goal of reducing food loss and waste by 50 percent by 2030, by providing national estimates of food waste generation and management; convening, educating, and supporting communities seeking to reduce food waste; working collaboratively with the U.S. Department of Agriculture and U.S. Food and Drug Administration to reduce food waste; and providing funding to demonstrate anaerobic digester applications.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.2, Reduce Waste and Prevent Environmental Contamination in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA will focus on efforts to strengthen the U.S. recycling system by investing in solid waste management infrastructure and consumer education and outreach, address the global issue of plastic waste, engage communities, and prevent and reduce food loss and waste. The Program will conduct the following activities:

⁴²³ In 2018, in the United States, approximately 292 million tons of municipal solid waste (MSW) were generated. Of the MSW generated, approximately 94 million tons were recycled or composted, equivalent to a 32.1 percent recycling and composting rate. https://www.epa.gov/sites/default/files/2021-01/documents/2018 ff fact sheet dec 2020 fnl 508.pdf.

⁴²⁴ For more information, please refer to: https://www.epa.gov/system/files/documents/2021-11/final-national-recycling-strategy.pdf.

⁴²⁵ For more information, please refer to: https://www.congress.gov/116/plaws/publ224/PLAW-116publ224.pdf.

- Provide national leadership and direction on approaches to reduce environmental impacts and increase the safe and effective reuse/recycling of materials, with a special focus on plastic waste, critical minerals and electronics, and food waste.
- Contribute towards global climate change efforts and demonstrate U.S. leadership internationally through participation in resource efficiency dialogues.
- Implement the National Recycling Strategy collaboratively with stakeholders and track progress towards achieving the national recycling goal. Develop and implement additional strategies in key areas with the greatest potential to reduce the lifecycle impacts of materials, including municipal solid waste; plastic waste, food waste, critical minerals and electronics (e.g., batteries), textiles, and construction and demolition debris.
- Expand efforts to gather data and provide high-quality scientific information on materials management, including finalizing an assessment of the investment required to modernize waste management infrastructure to achieve consistent collection across the Nation and to provide all citizens with access to recycling services on par with access to disposal; collecting data on curbside recycling and single-use plastics; conducting an analysis of different policy approaches for recovering materials; and finalizing a study on the social costs associated with nonrecycling or uncontrolled disposal.
- Administer grant programs for state, territorial, tribal, and local governments to build and
 enhance recycling capacity, infrastructure, and consumer education and outreach around
 the country. The grant programs will support state, territorial, and tribal communities
 seeking to enhance their capacity to recover and recycle materials by modernizing local
 waste management systems and improving education and outreach.
- Develop and administer a model recycling program toolkit for use in carrying out the consumer education and outreach grant program. Provide assistance to the educational community to promote the introduction of recycling principles and best practices into public school curricula.
- Continue developing and finalizing studies as required by Save Our Seas 2.0 Act to address post-consumer materials management, including plastic waste.
- Continue coordinating with federal agencies to reduce food waste in their facilities, initiate food waste prevention pilot projects, and connect stakeholders with food waste reduction technologies such as anaerobic digestion.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$299.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$163.0) This program change increases programmatic activities including the reduction of waste generation at the source.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA). Save our Seas 2.0 Act, 2020, Pub. L. 116-224, Consolidated Appropriations Act, 2022, Pub. L. 117-103.

Toxics Risk Review and Prevention

Endocrine Disruptors

Program Area: Toxics Risk Review and Prevention Goal: Ensure Safety of Chemicals for People and the Environment Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$5,209	\$7,533	\$7,614	\$81
Total Budget Authority	\$5,209	\$7,533	\$7,614	\$81
Total Workyears	6.6	7.6	7.6	0.0

Program Project Description:

The Endocrine Disruptor Screening Program (EDSP) was established in 1996 under authorities contained in the Food Quality Protection Act (FQPA) and the Safe Drinking Water Act (SDWA) amendments. The EDSP is transitioning to the use of high throughput (HT) screening and computational toxicology (CompTox)⁴²⁶ tools to: screen thousands of chemicals for endocrine activity; establish policies and procedures for screening and testing; and evaluate data to ensure chemical safety by protecting public health and the environment from endocrine disrupting chemicals. Implementing EDSP work into the Agency's risk assessment and risk management functions supports EPA's environmental justice (EJ) priorities, both by targeting substances based on effects to sensitive life stages and deploying rapid methods for assessing disparate chemical exposures to vulnerable communities.

EPA has run thousands of chemicals through HT assays, including the estrogen receptor (ER) and androgen receptor (AR) pathway models and the HT steroidogenesis assay. To further support the evaluation and validation of HT approaches, the EDSP has completed some limited targeted in vivo Tier 1 & 2 assays and is conducting systematic reviews of relevant in vivo data meeting EPA guidelines.

The Agency continues to engage the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel (SAP) in the scientific peer review of HT tools including ToxCast⁴²⁷ to evaluate their use in chemical screening as alternatives to Tier 1 assays and to integrate into more complex evaluation frameworks. Embedded into the EDSP approach is a focus on sensitive life stages during the tiered testing and assessment processes. As this data is incorporated into conceptual risk assessment models, it can specifically inform decisions on vulnerable subpopulations. Further, as EDSP prioritizes future chemical assessments, HT tools such as ExpoCast⁴²⁸ will assist in the identification of priority chemical targets with vulnerable subpopulations and EJ concerns for further investigation.

⁴²⁶ For additional information, please visit; https://www.epa.gov/endocrine-disruption/use-high-throughput-assays-andcomputational-tools-endocrine-disruptor.

427 For additional information, please visit: https://www.epa.gov/chemical-research/toxicity-forecasting.

⁴²⁸ For additional information, please visit: https://www.epa.gov/chemical-research/rapid-chemical-exposure-and-dose-research.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the FY 2022 – 2026 EPA Strategic Plan.

Under the current tiered framework, imposing the EDSP Tier 1 battery for all 10,000+ substances in the EDSP Universe of Chemicals would cost the regulated community more than \$10 billion in addition to EPA resources for staff to manage the regulatory infrastructure to order and review the tests. Given the current national and international laboratory testing capacity, it would take many years to complete, and involve the sacrifice of many millions of animals. To address these issues, in FY 2023, the Agency will:

- Continue collaborations with EPA's research programs in order to increase scientific confidence in HT approaches which will support a more refined, integrated endocrine activity exposure-based approach to EDSP chemical screening;
- Continue execution of a multi-year plan for implementation of the EDSP for pesticide active ingredients and inerts; and,
- In collaboration with EPA's research programs, continue HT screening on pesticide substances that were not part of the *ToxCast* chemical sets.

In FY 2023 these efforts will address several key milestones including: (1) working towards finalizing EDSP List 1, Tier 1 decisions including potential initiation of Tier 2 assays; and (2) implementing EDSP evaluations of pesticide active ingredients to support pesticide registrations and registration review, in line with Administration priorities on EJ. The EDSP screening and testing framework explicitly includes evaluations on vulnerable subpopulations such as differences among lifestages such as pregnancy, infants, and early childhood. Moreover, the EDSP Tier 1 battery is designed to identify potential effects on reproduction, a key indicator for EJ.

In FY 2021, the EDSP was the subject of an EPA Office of Inspector General (OIG) report; ⁴²⁹ the milestones above are consistent with that report. In response to this report, in FY 2022, the EDSP plans to begin annual reporting on progress, develop a short-term strategy to support implementation, develop short-term performance metrics, and release a key document related to use of new approach methodologies (NAMs) in the EDSP. In response to the OIG, EPA has already established better communications between offices with testing responsibilities and updated the EDSP webpage to be more informative for stakeholders. ⁴³⁰ In FY 2023, in addition to the milestones above, the EDSP will continue to make progress on additional items to meet FY 2024 deadlines, including potential issuance of test orders on outstanding chemicals and determinations of the endocrine-relevant data to make mandatory as part of the pesticide registration process.

As outlined in the OIG report, during FY 2023, EPA plans to begin and continue incorporating EDSP into the regulatory programs for which it was intended. Planning for this remains ongoing, including development of a new strategic planning document focused on implementation, development of performance measures, and annual reviews. Further, no program has

⁴²⁹ For additional information on OIG's report "EPA's Endocrine Disruptor Screening Program Has Made Limited Progress in Assessing Pesticides," please visit: https://www.epa.gov/office-inspector-general/report-epas-endocrine-disruptor-screening-program-has-made-limited.

⁴³⁰ For additional information, please visit: https://www.epa.gov/endocrine-disruption.

systematically incorporated HT and *CompTox* tools and results into their regulatory decision-making. A refined, multi-year estimate beyond the baseline testing and review costs cannot be established until the Program has gained more experience with actual decisions.

The EDSP will continue to collaborate with relevant bodies and international partners, such as the Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM) and the Organisation for Economic Co-operation and Development (OECD) to maximize the efficiency of EPA's resources and promote adoption of internationally harmonized test methods, particularly high throughput or computational approaches, for evaluating the potential endocrine effects of chemicals. EPA represents the U.S. as either the lead or a participant in OECD projects involving the improvement of assay systems, including the development of non-animal screening and testing methods.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$66.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$15.0) This program change increases contractual support for pesticide evaluations under the EDSP.

Statutory Authority:

Federal Food Drug and Cosmetic Act (FFDCA), § 408(p); Safe Drinking Water Act (SDWA), § 1457.

Pollution Prevention Program

Program Area: Toxics Risk Review and Prevention Goal: Ensure Safety of Chemicals for People and the Environment Objective(s): Promote Pollution Prevention

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$11,476	\$12,558	\$17,121	\$4,563
Total Budget Authority	\$11,476	\$12,558	\$17,121	\$4,563
Total Workyears	48.3	49.2	58.2	9.0

Program Project Description:

The Pollution Prevention (P2) Program is one of EPA's primary tools for advancing environmental stewardship and sustainability by federal, state, and tribal governments, businesses, communities, and individuals. The Program also is the primary implementation mechanism for the Pollution Prevention Act (PPA) of 1990. The P2 Program seeks to alleviate environmental problems by leveraging business-relevant approaches to achieve significant reductions in the generation of hazardous releases to air, water, and land; reductions in the use of hazardous materials; reductions in the generation of greenhouse gases; and reductions in the use of water. As a result of these preventative approaches, the P2 Program helps businesses and others reduce costs and access market opportunities. The Program's efforts advance the Agency's priorities to pursue sustainability, to take action on climate change, to make a visible difference in communities, including overburdened and underserved communities with environmental justice (EJ) concerns, and to ensure chemical safety. The P2 Program includes a counterpart P2 Categorical Grants Program in the State and Tribal Assistance Grants (STAG) account. ⁴³¹

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.2, Promote Pollution Prevention in the $FY\ 2022-2026\ EPA\ Strategic\ Plan$. FY 2023 funding will continue to support the following P2 programs:

P2 Technical Assistance

The P2 technical assistance program supports businesses, states, tribes, and other partners to promote and facilitate the adoption of approaches that make good business sense and improve multi-media environmental conditions and climate impacts through reductions in the release of hazardous materials and pollutants, such as greenhouse gases. EPA invests in analyses, tool development, training, outreach, and partnerships to provide the information and tools needed to bring awareness to industries of P2 approaches and benefits and to enable their widespread implementation to prevent or reduce pollution. The P2 Program leverages the success of EPA

⁴³¹ For additional information about the EPA P2 Program, please visit: http://www.epa.gov/p2/.

grantees and client businesses by amplifying and replicating environmental stewardship, and sustainability successes to similar businesses in other locales. 432 Such economies of scale for P2 are central to maximizing the effectiveness of the Program. To further advance EJ in FY 2023, EPA will use analyses of toxic chemical releases from facilities and industries near to communities with EJ concerns (from Toxics Release Inventory [TRI] reporting and other chemical release data) and use sector-specific case studies and best practices—combined with outreach and training—to facilitate adoption of P2 practices in those industries.

Safer Choice Program

EPA certifies and allows use of the Safer Choice label⁴³³ on products containing ingredients that meet stringent health and environmental criteria and undergo annual audits to confirm the products are manufactured to the Safer Choice Standard's rigorous health and environmental requirements. With hundreds of partner companies and approximately 1,900 certified products in the marketplace, companies have invested heavily in this EPA partnership, and consumer, retailer, and industry interest in Safer Choice—and safer chemical products—continues to grow across chemical product value chains. The Safer Choice Program will expand into additional product categories and seek to increase consumer and commercial recognition of Safer Choice products. In FY 2023, EPA also will continue its Partner of the Year Awards Program, 434 which recognizes organizations and companies for their leadership in formulating, and making available to communities, products made with safer ingredients.

In FY 2023, Safer Choice will integrate and address EJ concerns through outreach and partnership activities. Efforts to make Safer Choice-certified products more accessible to communities with EJ concerns will be expanded upon with particular focus on people/communities of color, lowincome, tribal and indigenous populations, and other vulnerable populations such as the elderly, children, and those with pre-existing medical conditions. Safer Choice will work with retailers and product manufacturers to help them develop even more products containing safer chemical ingredients that are easy to identify and purchase. Safer Choice also will strengthen partnerships with Minority/Women-owned Businesses (M/WBE) and organizations that serve communities with EJ concerns. Safer Choice will work to empower custodial staff and house cleaning companies through education to gain access to Safer Choice-certified products to improve indoor air quality and reduce exposure-related asthma. 435

To enhance transparency and to facilitate expansion of safer chemical choices and products, EPA has included on the Program's website a list of non-confidential chemicals that meet the Safer Choice Program criteria and that are allowed in the Program's labeled products. To date in FY 2022, this Safer Chemical Ingredients List contains 1,033 safer chemicals, up from 997 in 2021, and EPA will continue to update this list in future years as the Program evaluates additional chemical ingredients and chemical categories and approves products for the use of the Safer Choice label.

https://journals.lww.com/joem/Fulltext/2003/05000/Cleaning Products and Work Related Asthma.17.aspx.

⁴³² For additional information, please see the Pollution Prevention Program narrative under the STAG account/appropriation.

⁴³³ For additional information about the Safer Choice Program, please visit: https://www.epa.gov/saferchoice.

⁴³⁴ For additional information on the Partner of the Year Awards program, please visit: https://www.epa.gov/saferchoice/safer-<u>choice-partner-year-awards</u>.

435 For additional information, please see:

Environmentally Preferable Purchasing Program (EPP)

The Environmentally Preferable Purchasing Program (EPP)⁴³⁶ implements the direction provided to EPA in the Pollution Prevention Act, the National Technology Transfer and Advancement Act, 437 Federal Acquisition Regulations, and Executive Orders which mandate sustainable federal procurement, including through the development and use of sustainability standards, specifications, and ecolabels. In FY 2015 the EPP Program issued the EPA Recommendations of Specifications, Standards, and Ecolabels for Federal Purchasing. Through FY 2021, these recommendations have been maintained and updated to include 48 private sector standards and ecolabels that cover 30 product and service categories. These recommendations help federal procurement officials determine which private sector standards and ecolabels, among sometimes dozens within a single purchase category, are appropriate and effective in meeting Federal procurement goals and mandates. The EPP Program's work has generated significant cost savings and environmental benefits to the federal government. For example, for electronics products, the federal government purchased nearly 7 million Electronic Product Environmental Assessment Tool (EPEAT)-registered products in 2018, resulting in a cost savings to the federal government of around \$182.5 million. EPEAT is one of over 40 referenced and relevant private sector standards and ecolabels which help federal purchasers identify and procure environmentally preferable products and services. 438 EPA also coordinates federal procurement programs that integrate environmental performance into procurement, including building tools for integrating sustainable procurement into government contracts, and putting tools into the hands of federal procurement officials, collaborating with federal agencies such as the General Services Administration, National Institute of Standards and Technology, the Departments of Defense and Energy, and more. EPA plans to expand its Recommendations for Specifications, Standards and Ecolabels for Federal Purchasing in categories that can support Administration priorities.

EPA is characterizing per- and polyfluoroalkyl substances (PFAS) provisions of existing private sector sustainability standards, ecolabels, and certifications to identify products and purchase categories associated with key PFAS use and to assess and prioritize PFAS conditions of use. With increased resources in FY 2023, EPA will enhance public protection from potential effects of PFAS through labeling to help purchasers identify products that meet specific environmental performance criteria. EPA will conduct the following activities:

- Assessing and recommending additional ecolabels and standards with criteria specifically supporting reduction or elimination of PFAS use in key product categories not yet covered by the EPA Recommendations for Standards, Specifications, and Ecolabels for Federal Purchasing. 439
- Build, implement, maintain, and update tools for integrating EPA recommendations into federal e-procurement systems, initiate identification and monitoring of relevant government contracts for sustainable purchasing requirements, and develop tools to ensure that PFAS data is captured for compliance in the Federal Procurement Data System (FPDS).

⁴³⁶ For additional information on the EPP Program, please visit: http://www.epa.gov/greenerproducts/buying-green-federal-

⁴³⁷ For additional information on the National Technology Transfer and Advancement Act, please visit: https://www.nist.gov/standardsgov/national-technology-transfer-and-advancement-act-1995.

⁴³⁸ For additional information on Recommendations for Specifications, Standards and Ecolabels for Federal Purchasing, please visit: https://www.epa.gov/greenerproducts/recommendations-specifications-standards-and-ecolabels-federal-purchasing. ⁴³⁹ For additional information, please visit: https://www.federalregister.gov/documents/2021/12/13/2021-27114/catalyzingclean-energy-industries-and-jobs-through-federal-sustainability.

- Initiate and engage in private sector standards development activities that address product categories known to contain PFAS.
- Create a central product registry to identify products that meet EPA's assessment of PFAS specifications.
- Collaborate with the Department of Defense (DoD) on performance-based, rather than material-based, specifications and standards for equipment (e.g., textiles, coatings, firefighting foam) for DoD and Department of Homeland Security uses.
- Work with other federal agencies and the private sector to initiate a performance-based technology innovation challenge for a set of PFAS-free product categories for which use of non-PFAS options could be technically and economically feasible with respect to key federal purchasing categories.

To further support EPA's goals for equity and EJ, the EPP Program will begin to develop and implement training and outreach for disproportionately affected communities, as well as state, tribal, and local governments, to assist in facilitating product and service procurement choices that are environmentally sound and promote human and environmental health.

Green Chemistry

The Green Chemistry Program 440 fosters the sustainable design of chemical products and processes. The Program also analyzes green chemistry innovations and works with partners and external stakeholders to facilitate market adoption and penetration of new commercially successful chemistries and technologies. Its Green Chemistry Challenge Awards serve a critical role in raising the profile, importance, and credibility of innovative and market-ready green and sustainable chemistry technologies. During the Program's more than 25 years of progress, EPA has received more than 1,800 nominations and presented awards to 123 technologies, demonstrating the interest among stakeholders to be recognized at the national level for developing market-ready and/or market-mature green chemistry solutions. The contribution of greener chemistries to addressing climate change is very clear. Winning technologies are estimated to eliminate 7.8 billion pounds of carbon dioxide equivalents released to air—the equivalent of taking 770,000 cars off the road each year. In FY 2023, EPA will begin to utilize training materials developed in FY 2022 to help state, tribal, local, and industry stakeholders acquire information and understanding of the benefits from these innovations.

In FY 2023, the Green Chemistry Program will begin to work with awardees and nominees to pursue the goal of market-oriented environmental and economic progress through increased adoption of these innovations. EPA will begin to develop training materials to help state, tribal, local, and industry stakeholders acquire information and understanding of the benefits from these innovations and will support and lead portions of EPA's responsibilities for implementation of the Sustainable Chemistry Research and Development Act of 2020.

⁴⁴⁰ For additional information on the Green Chemistry Program, please visit: https://www.epa.gov/greenchemistry.

⁴⁴¹ For additional information, please visit: https://www.epa.gov/greenchemistry/information-about-green-chemistry-challenge.

⁴⁴² P2 Training materials are available to the public on various EPA websites including but not limited to: (1)

https://www.epa.gov/p2/grant-programs-pollution-prevention (Grant Programs for P2); (2) https://www.epa.gov/p2/p2-grant-program-resources-applicants (Resources for grant applicants [FAQs, application checklist, P2-EJ Facility Mapping Tool and a recorded webinar]); (3) https://www.epa.gov/p2/pollution-prevention-tools-and-calculators (P2 Tools and calculators); and (4) https://www.epa.gov/p2/p2-resources-business (P2 resources for business).

Performance Measure Targets:

(PM P2mtc) Reduction in million metric tons of carbon dioxide equivalent (MMTCO ₂ e) released per year attributed to EPA pollution prevention	FY 2022 Target	FY 2023 Target
grants.	1.2	1.2

(PM P2sc) Number of products certified by EPA's Safer Choice program.	FY 2022	FY 2023
	Target	Target
	1,950	2,000

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$355.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$4,208.0 / +9.0 FTE) This program change provides additional funding and FTE to enhance protection of the public from potential effects of PFAS through labeling as well as to implement Administration priorities related to PFAS. This investment also includes \$1.689 million in payroll.

Statutory Authority:

Pollution Prevention Act of 1990 (PPA); Toxic Substances Control Act (TSCA).

Toxic Substances: Chemical Risk Review and Reduction

Program Area: Toxics Risk Review and Prevention Goal: Ensure Safety of Chemicals for People and the Environment Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$72,643	\$60,280	\$124,243	\$63,963
Total Budget Authority	\$72,643	\$60,280	\$124,243	\$63,963
Total Workyears	259.2	331.7	532.3	200.6

Total program work years in FY 2023 include 51.6 FTE funded by TSCA fees. TSCA Service Fees are not included in the budget formulation, but EPA is projected to collect approximately \$4.65 million in fees in FY 2023, including fees collected from one TSCA Section 6 Manufacturer-Requested Risk Evaluations should the request be received and granted. Projected collections also are subject to potential changes in fee levels in response to statutory requirements for the TSCA User Fee Rule to be updated every three years.

Program Project Description:

EPA has significant responsibilities under the Toxic Substances Control Act (TSCA) for ensuring the safety of chemicals that are already in or are entering into commerce and addressing unreasonable risks to human health and the environment. These responsibilities are executed by the Agency through the Chemical Risk Review and Reduction (CRRR) Program, which works to ensure the safety of:

- Existing chemicals, 443 by collecting chemical data, prioritizing chemicals for risk evaluation on the basis of that data, conducting risk evaluations, and developing and implementing risk management actions to prevent any unreasonable risk posed by their manufacture, processing, use, distribution in commerce and/or disposal;
- New chemicals, by reviewing new chemical submissions from manufacturers and processors and taking action to mitigate potential unreasonable risks to health or the environment before those chemicals can enter the marketplace; and
- Other chemicals that may pose unreasonable risks to human health and the environment.

The CRRR Program will play an important role in achieving the Administration's goals to enhance environmental justice (EJ) and tackle the climate crisis. Examples include: engaging tribes and other overburdened and underserved communities with EJ concerns in identifying exposure pathways; adhering to EPA's Guidance on Considering Environmental Justice During the

⁴⁴³ "Existing Chemicals" are those already in use when TSCA was first enacted in 1976 and those which have since gone through review by the TSCA New Chemicals Program. These include certain prevalent, high-risk chemicals known generally as "legacy chemicals" (e.g., PCBs, mercury), which were previously covered in a separate Chemical Risk Management (CRM) budget justification. The CRM program area was combined with Chemical Risk Review and Reduction effective FY 2015.

Development of an Action⁴⁴⁴; and ensuring that TSCA chemical safety data analytical tools are made publicly available in ways that are accessible to communities with EJ concerns.

TSCA authorizes EPA to collect fees from chemical manufacturers and processors to defray up to 25 percent of the costs for administering certain sections 445 of TSCA. 446 Fee levels are set by regulation and may be adjusted on a three-year basis for inflation and to ensure that fees defray approximately 25 percent of relevant costs. The TSCA Fee rule became effective on October 1, 2018.⁴⁴⁷ CRRR Program fees collected or projected to be collected in FY 2019–FY 2021 under this rule equated to approximately 14 percent of associated expenditures for those three fiscal years. EPA proposed revisions to the rule in December 2020 but plans to re-propose in light of public comments. As such, toward the end of FY 2023, EPA expects to finalize an amended fee rule that would defray up to 25 percent of relevant costs, as statutorily allowed. 448

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the FY 2022 – 2026 EPA Strategic Plan.

The 2016 amendments to TSCA imposed significantly increased responsibilities for the CRRR Program. Building on the request included in the FY 2022 President's Budget, the Agency is requesting an additional 200.6 FTE and \$63.9 million for the CRRR Program in FY 2023, which includes \$4.7 million and 11 FTE to support the implementation of EPA's PFAS Strategic Roadmap. EPA will emphasize the integrity of scientific products, adherence to statutory intent and requirements, and timelines applicable to pre-market review of new chemicals, chemical risk evaluation and management, data development and information collection, the review of Confidential Business Information (CBI) claims, and other statutory requirements. These requested resources are essential for EPA to address its workload, including:

- Maintaining at least 20 EPA-initiated existing chemical risk evaluations in development at all times and completing EPA-initiated existing chemical risk evaluations within 3.5 years.
- Issuing protective regulations in accordance with statutory timelines addressing all unreasonable risks identified in each risk evaluation.
- Establishing a pipeline of chemicals prioritized for future risk evaluation.
- Using test orders and a new strategy for tiered data collection, requiring development of data critical to existing chemical risk evaluation and risk management activities, and systematically

⁴⁴⁴ For more information, please visit: https://www.epa.gov/environmentaljustice/guidance-considering-environmental-justiceduring-development-action.

⁴⁴⁵ The costs of implementing TSCA Sections 4-6 are defrayable up to the statutory caps, as are the costs of collecting, processing, reviewing and providing access to and protecting from disclosure, as appropriate, chemical information under Section 14.

⁴⁴⁶ The authority to assess fees is conditioned on appropriations for the CRRR Program, excluding fees, being held at least equal to the amount appropriated for FY 2014.

⁴⁴⁷ The statute authorizes EPA to collect fees from chemical manufacturers (including importers) and, in limited instances, processors who: are required to submit information (Section 4); submit notification of or information related to intent to manufacture a new chemical or significant new use of a chemical (Section 5); manufacture, (including import) a chemical substance that is subject to an EPA-initiated risk evaluation (Section 6); or request that EPA conduct a risk evaluation on an existing chemical (Section 6), subject to the Agency's approval of the request. 448 This rule may not go into effect until FY 2023.

- reviewing data submitted to the EPA for scientific reliability, relevance, and transparency as mandated by the 2016 TSCA Amendments.
- Conducting risk assessments for approximately 650 new chemical notices and exemption submissions, and manage the identified risks associated with the chemicals.
- Having up to five risk evaluations requested by manufacturers in development.
- Developing and implementing a collaborative research program focused on approaches for performing risk assessments on new chemical substances.
- Reviewing and making determinations on confidential business information (CBI) claims contained in TSCA submissions; making certain CBI information available to stakeholders; and publishing identifiers for each chemical substance for which a confidentiality claim for specific chemical identity is approved.
- Carrying out other required TSCA CRRR activities as described below.

Primary TSCA Implementation Activities

Section 4: Testing of Chemical Substances and Mixtures. In January 2021, the Agency issued Test Orders for nine additional chemicals currently undergoing TSCA risk evaluation and will issue additional test orders for these chemicals and other chemicals undergoing risk evaluation in FY 2022. In addition, EPA will continue to implement and refine the National PFAS Testing Strategy in FYs 2022 and 2023. Accordingly, EPA is committed to issuing test orders for at least 24 PFAS chemicals in FY 2022. In FY 2023, the resources requested will enable the Agency to review test protocols and test data submitted in response to any recently issued Test Orders and previously issued Test Rules and Enforceable Consent Agreements (ECAs); begin implementation of additional phases of the National PFAS Testing Strategy; and issue additional Test Orders and promulgate Test Rules and/or ECAs. In addition, in FY 2023, EPA intends to further implement the PFAS Testing Strategy by refining the initial structural categories using data from EPA's Office of Research and Development (ORD) as well as further evaluating degradation products and exposure data. The EPA expects to issue further TSCA Test Orders after the categories are refined, as well as to promulgate test rules and/or ECAs.

Section 5: New Chemicals. The New Chemicals Program is important in ensuring the safety of new chemicals before they enter commerce. The 2016 TSCA amendments significantly changed the way EPA implemented the New Chemicals Program. Under the prior law, EPA only issued determinations for about 20 percent of new chemical submissions, whereas under the amended law, EPA is required to issue determinations for 100 percent of new chemical submissions (a five-fold increase). In FY 2023, the Agency expects to conduct risk assessments for approximately 650 new chemical notices and exemption submissions;⁴⁴⁹ make affirmative determinations on whether unreasonable risks are posed under those chemicals' conditions of use; manage identified risks associated with the chemicals through the issuance of Orders and Significant New Use Rules (SNURs); and require the development of additional data where information is insufficient to conduct a reasoned evaluation. EPA also intends to continue its commitment to transparency by

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⁴⁴⁹ For example, Pre-Manufacture Notices (PMNs), significant new use notifications (SNUNs), microbial commercial activity notices (MCANs), low volume exemptions (LVEs), low releases and low exposures exemptions (LoREX), test marketing exemption (TME), TSCA experimental release application (TERA) and Tier 1 and 2 exemptions.

⁴⁵⁰ For PMNs, MCANs and SNUNs, as required by law, the Agency must generally complete these review, determination, and associated risk management activities within 90-days of receiving the submission, subject to extensions or suspension under certain circumstances.

making new chemical notices and EPA information generated in the review of notices available to the public via the *ChemView* database⁴⁵¹ and on EPA websites. In FY 2023, EPA also will propose SNURs for approximately 150 consent orders. Additionally, EPA is implementing a performance metric to measure compliance with past TSCA regulatory actions. These actions include consents orders and SNURs issued for PFAS chemicals.

Section 6: Existing Chemicals. Where unreasonable risks in existing chemicals are found, the Agency also must commence risk management action under TSCA Section 6 to address those risks. The resources requested in FY 2023 are critical for the Agency to continue implementing these additional requirements to address the risks of existing chemicals, including:

- **Prioritization** is the initial step in the process of evaluating existing chemicals under TSCA and is codified in a final Chemical Prioritization Process rule. The purpose of prioritization is to designate a chemical substance as either High-Priority for further risk evaluation, or Low-Priority for which risk evaluation is not warranted at the time. TSCA requires that upon completion of a risk evaluation for a High-Priority chemical, EPA must designate at least one additional High-Priority chemical to take its place, ensuring that at least 20 EPA-initiated risk evaluations are constantly underway. In FY 2023, EPA will continue working to identify additional High-Priority chemicals by obtaining, validating, and analyzing chemical safety data to identify chemicals for which sufficient data are available to conduct scientifically sound risk evaluations and the order in which such chemicals are evaluated.
- **Risk Evaluation**: EPA initiated risk evaluations for the first 10 chemicals in December 2016. The Agency missed the 3.5-year statutory deadline for completing TSCA risk evaluations for nine of the chemicals, and work on many of those chemical risk evaluations has continued. In FY 2021 and FY 2022, developed approaches for the consideration of exposure pathways (*i.e.*, air, water, disposal) that were originally omitted from the scopes of the HPS and MRRE risk evaluations, and to address "fenceline" risk (risks to exposed populations in communities adjacent to the perimeter of manufacturing facilities, often vulnerable and underserved populations) for 7 of the first 10 chemical risk evaluations. This work added to the challenge of completing additional risk evaluations, and in FY 2023 this work will continue.

452 For additional information, please visit: https://www.regulations.gov/document?D=EPA-HQ-OPPT-2016-0636-0074.

⁴⁵¹ To access *ChemView*, please visit: https://chemview.epa.gov/chemview.

⁴⁵³ TSCA required that EPA designate by December 2019 at least 20 chemical substances as High-Priority for risk evaluation, and also at least 20 chemical substances as Low-Priority. On December 20, 2019, EPA finalized the designation of 20 chemical substances as High-Priority for upcoming risk evaluations. For additional information, please visit: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/chemical-substances-undergoing-prioritization-high.

⁴⁵⁴ On February 20, 2020, EPA finalized the designation of 20 chemical substances as Low-Priority. For additional information, please visit: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/low-priority-substances-under-tsca.

⁴⁵⁵ EPA removed consideration of personal protective equipment (PPE) unreasonable risk determinations for the first 10 chemical risk evaluations, re-examined the risk evaluations of seven of those chemicals to address overlooked and/or inadequately assessed exposure pathways (including those affecting fenceline, underserved or disproportionately burdened communities), is developing a supplemental RE for one chemical due to omission of exposure pathways, and, in part as a result of litigation against the Agency, is conducting a second risk evaluation for asbestos to include types and uses that were excluded from the first one.

⁴⁵⁶ In January 2022, EPA released for public comment and peer review version 1.0 of a screening methodology that will be used to further examine whether the policy decision to exclude air and water exposure pathways from the risk evaluations will lead to a failure to identify and protect fenceline communities. Review of the screening level methodology will include review by the Science Advisory Committee on Chemicals (SACC). <u>See</u>, https://www.epa.gov/newsreleases/epa-releases-screening-methodology-evaluate-chemical-exposures-and-risks-fenceline.

EPA initiated risk evaluations for the first set of 20 High-Priority chemicals in December 2019. 457 On September 4, 2020, EPA released final scoping documents for these chemicals 458 with the 20 evaluations required to be completed by December 2022, or June 2023 if statutorily authorized extensions are required to be exercised. The Agency will expand the focus of the risk evaluations to ensure that exposure pathways affecting the general public, fenceline communities, and overburdened/underserved/disproportionately burdened communities are properly evaluated in accordance with the law Specifically, it is expected that the Agency will include expanded consideration of potentially exposed and susceptible subpopulations, including environmental justice considerations, as a result of engagement with overburdened and underserved communities through mechanisms such as the National Tribal Operations Committee (NTOC)⁴⁵⁹ and the National Tribal Toxics Council (NTTC).⁴⁶⁰

The Agency has experienced delays in obtaining responses from TSCA Section 4 Test Orders and Section 8 Data Gathering Rules intended to provide information critical to the completion of the evaluations. In addition, manufacturers may submit requests to EPA to evaluate specific additional chemicals. The first two Manufacturer Requested Risk Evaluations (MRREs) began in FY 2020. A third was started in FY 2021, and a fourth request is currently being considered. Those initial MRREs will continue throughout FY 2022 and are for chemicals that were on the 2014 TSCA Work Plan. 461 The resources requested for FY 2023 will support efforts to meet statutory mandates and other requirements while maintaining the Agency's commitment to evidence-based decisions guided by the best available science and data.

Risk Management: When unreasonable risks are identified in the final risk evaluation, EPA must promulgate risk management action rulemakings under TSCA Section 6(a) to address the unreasonable risk. This work will adhere to EPA's Guidance on Considering Environmental Justice During the Development of an Action and its companion Technical Guidance for Assessing Environmental Justice in Regulatory Analysis. 462 EPA commenced development of risk management actions in FYs 2020 and 2021 after determining that each of the first 10 chemicals evaluated under Section 6 presented unreasonable risk of injury to health or the environment under the assessed conditions of use. EPA will continue development of these rulemaking actions in FY 2023, including issuance of proposed rules for certain chemicals. EPA also will continue or begin developing final rules for actions proposed in FY 2022 and FY 2023, with anticipated promulgation in FY 2024. 463

⁴⁵⁷ For additional information, please visit: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/chemicalsubstances-undergoing-prioritization-high.

⁴⁵⁸ For additional information, please visit: https://www.epa.gov/chemicals-under-tsca/epa-releases-final-scope-documents-andlist-businesses-subject-fees-next-20.

⁴⁵⁹ For additional information on NTOC, please visit: https://www.epa.gov/tribal/tribal-partnership-groups#ntoc

⁴⁶⁰ For additional information on NTTC, please visit: https://www.epa.gov/chemicals-under-tsca/national-tribal-toxics-council- nttc-technical-support-request-applications

^{461 &}lt;u>See https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/tsca-work-plan-chemicals.</u>

⁴⁶² For additional information, please visit: https://www.epa.gov/environmentaljustice/technical-guidance-assessingenvironmental-justice-regulatory-analysis.

⁴⁶³ EPA is re-examining the risk evaluations of seven of those chemicals to address overlooked and/or inadequately assessed exposure pathways (including those affecting overburdened, underserved or disproportionately burdened communities), which may impact risk management actions under development. See, https://www.epa.gov/newsreleases/epa-announces-path-forwardtsca-chemical-risk-evaluations. As a result, proposed rulemakings will not be published for public comment until the review and any update of the risk evaluations are complete. EPA will continue to engage stakeholders in dialogue regarding these risk management actions to ensure the Agency has the benefit of input from interested parties. This engagement will include meetings

TSCA also mandated that EPA promulgate Section 6 risk management rules for certain Persistent, Bioaccumulative, and Toxic (PBT) chemicals on the 2014 TSCA Work Plan without undertaking further risk evaluation. ⁴⁶⁴ EPA issued five final rules in January 2021EPA requested and received comment on the January 2021 PBT rules and, in September 2021, announced its intent to initiate a new rulemaking. EPA anticipates proposing new rules for five PBT chemicals. In FY 2023, EPA anticipates issuing further proposed revisions to the PBT rules.

Section 14: Confidential Business Information. EPA is required under TSCA Section 14 to review and make determinations on CBI claims contained in TSCA submissions; process requests for and make certain CBI information available to states, tribes, health and medical professionals, first responders, under defined circumstances; and assign and publish unique identifiers for each chemical substance for which a confidentiality claim for specific chemical identity is approved. In FY 2023, EPA will assign unique identifiers to chemicals where CBI claims for chemical identity are approved and expects to complete CBI claim reviews for more than 2,000 new cases, and approximately 1,500 chemical identity claims.

TSCA Information Technology (IT) and Data Tools Infrastructure. IT systems development and maintenance will continue in FY 2023 with the goal of minimizing reporting burdens on industry and streamlining data management by EPA, including the following activities:

- Continuing enhancement of the TSCA Chemical Information System to reduce manual handling of data and increase internal EPA access to data relevant to chemical assessments and expedite review of chemicals.
- Initiating development of new tools for hazard and exposure identification, assessment, and characterization, while improving existing tools to better assess chemical risks.
- Maintaining the functionality of *ChemView*⁴⁶⁵ and plan for expanding the information it makes available to the public to include newly completed chemical assessments, worker protection information, and other new data reported to EPA under TSCA.
- Completing the TSCA CBI LAN assessment in preparation for network modernization.

Implementing TSCA depends on the collection and availability of information on chemicals from a wide variety of public and confidential sources. The EPA's data currently resides in multiple formats including paper files, microfiche, and numerous old electronic file formats. A critical need for improving EPA's performance on TSCA implementation is modernizing the IT systems necessary for chemical data collation, storage, and curation, and to make the data received under TSCA available in structured and consistent formats. The funding requested will support the following activities: initiating modernization of the existing TSCA IT infrastructure; enhancing the New Chemical Review (NCR) system; initiating steps toward automating publication of New Chemical Consent Orders and SNURs; continuing efforts regarding remaining TSCA CBI review workflow enhancements; analyzing and updating TSCA records data to identify and organize records for publication; making progress toward the development of a framework for enabling CIS

with key stakeholders and participation in events such as conferences and trade association meetings where EPA and stakeholders can share information.

⁴⁶⁴ TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, Section 6(h) (1) and (2).

⁴⁶⁵ For additional information, please visit: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/introduction-chemview.

to automatically assign unique identifiers (UIDs) as CBI claims are approved; making progress in the effort to digitize the remaining legacy 8(e)s and publish in *ChemView*; and initiating digitization of legacy documents.

Chemical Data Management Modernization. The international regulatory community has been moving towards using the International Uniform Chemical Information Database (IUCLID) to capture, store, maintain, and exchange data on intrinsic and hazardous properties of chemical substances. Data in IUCLID is centered around standardized reporting templates consistent with internationally accepted test guidelines and has CBI protection built in. EPA has begun to pilot an IUCLID framework, but resource constraints have limited EPA's implementation and adoption of IUCLID. With increased resources in FY 2023, the TSCA Program will collaborate with ORD to implement IUCLID to capture, store, and maintain data on intrinsic and hazard properties of chemicals. The Agency also will work with international partners to modify software applications to ensure EPA's unique needs and federal IT requirements are incorporated. Along with integration and consolidation of other legacy data systems, this initiative will modernize EPA's chemical data management infrastructure and deliver more efficient searching, collating, managing, and integrating data on chemicals, resulting in significant time and cost savings.

Collaborative Research Program to Support New Chemical Reviews. 466 In FY 2023, EPA will develop and implement a multi-year collaborative research program in partnership with ORD and other federal agencies. This collaboration is focused on approaches for performing risk assessments on new chemical substances under TSCA. The results of the effort are expected to bring innovative science to new chemical reviews, modernize the approaches used, and increase the transparency of the human health and ecological risk assessment process. The resources requested for FY 2023 are essential for EPA to implement the new chemicals program in accordance with statutory mandates and to address the backlog of older submissions. These resources also are critical to ensuring that the Agency can conduct robust risk assessments using best available science and data within the statutory timelines.

Other TSCA Sections, Mandates and Activities

Chemical Data Reporting (CDR) & Tiered Data Reporting (TDR) Rule. 467 In FY 2023, EPA plans to publish a rule that expands reporting requirements for chemicals that are candidates for—or selected as—high priority substances. The purpose is to acquire the most relevant and applicable data that will support risk evaluation. In FY 2023, EPA plans to finalize the Rule, responding to comments from the proposed rulemaking and modifying CDR requirements.

Other Section 8 Activities. In FY 2023, EPA will: publish a final section 8(a) rule for Asbestos; publish a final section 8(a)(7) rule for Per- and Polyfluoroalkyl Substances (PFAS); analyze 300

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⁴⁶⁶ See, https://www.epa.gov/newsreleases/epa-announces-collaborative-research-program-support-new-chemical-reviews.

⁴⁶⁷ Section 8(a) of TSCA requires manufacturers (including importers) to provide EPA with information on the production and use of chemicals in commerce. In March 2020, EPA amended the Chemical Data Reporting (CDR) rule to reduce burden for certain CDR reporters, improve data quality and align reporting requirements with amended TSCA. The recent Calendar Year 2020 CDR Reporting Cycle, which occurs every four years and covers CY 2016-2019, commenced on June 1, 2020, and concluded on January 29, 2021.

Substantial Risk (Section 8(e)) Notifications submitted by industry;⁴⁶⁸ and continue issuing other data gathering rules to obtain data needed for Section 6 prioritization and risk evaluations.

PFAS Roadmap Support. Per- and polyfluoroalkyl substances (PFAS) have been manufactured and used in a variety of industries globally since the 1940s, and they are still being used today. FY 2023 work will include: publishing and implementing a PFAS national testing strategy; ensuring a robust review process for new PFAS; reviewing previous decisions on PFAS; closing the door on abandoned PFAS and uses; and implementing a new PFAS reporting rule; and leading the development of a voluntary PFAS Stewardship Program. The funding requested in the FY 2023 President's Budget will allow EPA to: improve the Agency data submission process for test data and ensuring engagement with test order recipients to facilitate robust data collection; review study plans required to be submitted as a result of test orders and data submitted pursuant to the first round of test orders issued under TSCA for human health effects; integrate submitted data into systematic review databases; and analyze existing data in preparation for issuing additional orders to require additional testing for chemicals already subject to testing.

Polychlorinated Biphenyls (PCBs). PCBs are a nationwide problem and found in every region. TSCA requires essential work in evaluating a site for PCB exposures and reducing risks at that site. EPA regions do this by making site-specific PCB "use" determinations, evaluating exposures, and providing recommendations and specialized technical support to address the risks associated with PCBs legally and illegally "in use." EPA's regional offices will work with building owners to implement practical interim measures; develop outreach and technical assistance materials to prevent or reduce exposure to PCBs; and conduct risk evaluation of PCB exposure at local sites.

Mercury. In FY 2023, EPA will maintain the Mercury Electronic Reporting Application⁴⁶⁹ and conduct outreach to stakeholders on reporting requirements. EPA also will continue work under the Mercury Export Ban Act and related amendments related to the prohibition of export of certain mercury compounds, to support compliance with the Minamata Convention on Mercury, to which the United States is a party. EPA will collect and prepare information for publication in the CY 2023 update to the national mercury inventory and consider recommending actions to further reduce mercury use.

TSCA Citizen Petitions. In FY 2023, EPA will continue to meet the requirements of Section 21 of TSCA, which authorizes citizen petitions for the issuance, amendment, or repeal of certain actions (rules and orders) promulgated under specific components of TSCA Sections 4, 5, 6, and 8. The Agency must grant or deny a Section 21 petition within 90 days. If EPA grants a petition, the requested action must be initiated in a timely fashion. EPA has received 29 TSCA Section 21 petitions since September 2007. 470

Formaldehyde Standards for Composite Wood Products. In FY 2023, EPA will continue implementing regulations under the TSCA Title VI Formaldehyde Standards for Composite Wood

⁴⁶⁸ TSCA Section 8(e) Notifications require EPA be notified immediately when a company learns that a substance or mixture presents a substantial risk of injury to health or the environment.

⁴⁶⁹ The Mercury Electronic Reporting application is an electronic reporting interface and database within the Central Data Exchange (CDX).

⁴⁷⁰ For additional information, please visit: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/tsca-section-21.

Products Act (Public Law 111-199), which established national emission standards for formaldehyde in new composite wood products. 471

TSCA User Fees. Section 26 of TSCA authorizes EPA to collect user fees to offset 25 percent of the Agency's full costs for implementing TSCA sections 4, 5, 6, and 14.⁴⁷² In FY 2021, EPA collected \$28.65 million: \$3.35 million from section 5, \$24.05 million from 19 of the 20 section 6 EPA-Initiated Risk Evaluations, and \$1.25 million from one section 6 MRRE for a TSCA Work Plan chemical. ^{473,474} EPA's FY 2021 collections were as follows:

TSCA Section	Amount Collected
Section 5	\$3.35 million
Section 6 EPA-Initiated Risk Evaluations	\$24.05 million
Section 6 MRREs	\$1.25 million
Total	\$28.65 million

Because nearly \$17 million of the collections for the 19 section 6 Risk Evaluations was not due to be paid until September 2, 2021, those funds were not accessible to EPA until FY 2022. EPA will apportion FY 2021 section 6 collections over the risk evaluation lifecycle (3.5 years). EPA expects to collect approximately \$5.0 million in FY 2022⁴⁷⁵ and \$4.65 million in FY 2023. Projected collections also are subject to potential changes in fee levels, which are required to be updated every three years under TSCA.

Cumulative risk methodologies. EPA is conducting aggregate exposure and cumulative risk approaches to characterizing chemical exposure and risk in risk evaluations under TSCA. In FY 2023, the following foundational activities will be conducted to support statutory deadlines:

- Develop approaches to determine when aggregating chemical exposure across conditions of use is applicable.
- Develop approaches to identify co-exposure to chemicals to inform prioritization and to determine when cumulative assessments should be considered for relevant chemicals.
- Develop approaches for conducting aggregate exposure and cumulative risk assessments.
- Evaluate applicability and feasibility of biomonitoring data.
- Update and develop exposure and hazard models.
- Support for scientific and other publications.

Continuous Improvement of TSCA Implementation. In FY 2023, the Agency will continue to monitor and evaluate its progress related to core responsibilities under TSCA, such as completing

⁴⁷¹ For additional information, please visit: http://www2.epa.gov/formaldehyde/formaldehyde-emission-standards-composite-wood-products.

⁴⁷² TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, Section 26(b) (1) and (4). ⁴⁷³ The Agency invoiced \$88.2 thousand for Section 4 Test Orders in FY 2020 and FY 2021 but did not start receiving submissions until FY 2022.

⁴⁷⁴ The Agency invoiced \$88.2 thousand for Section 4 Test Orders in FY 2020 and FY 2021 but did not start receiving submissions until FY 2022.

⁴⁷⁵ \$1.6 million from the remaining section 6 EPA-Initiated Risk Evaluations invoices and \$3.4 million from section 5 submissions and section 4 Test Orders.

⁴⁷⁶ \$3.4 million in section 5 submissions and section 4 Test Orders and an additional amount from one TSCA section 6 Manufacturer-Requested Risk Evaluation at \$1.25M if the MRRE request is granted.

⁴⁷⁷ For additional information, please visit: https://www.epa.gov/tsca-fees/fees-administration-toxic-substances-control-act.

all EPA-initiated risk evaluations and associated risk management actions for existing chemicals within statutory timelines. In addition, EPA plans to further reduce review times and reduce the number of cases under review for more than 90 days for Section 5 new chemicals (PMNs, MCANs, and SNUNs). EPA also will undertake other forms of assessment and data gathering in FY 2023. Based on experience and peer review feedback, EPA is further refining its methods for conducting systematic review and will seek peer review of its TSCA Systematic Review Protocol in FY 2022. The Agency is collaborating with other agencies in this effort, including with the Interagency Testing Committee (ITC). In FY 2023, EPA will evaluate the information reported in response to the 8(d) rule for relevance to the risk evaluations for High-Priority chemicals using systematic review methods, which will enhance risk evaluations and EPA's ability to determine potential risk.

Performance Measure Targets:

(PM TSCA4) Number of HPS TSCA risk evaluations completed within statutory timelines.	FY 2022 Target	FY 2023 Target
v	0	8
(PM TSCA5) Percentage of existing chemical TSCA risk management	FY 2022	FY 2023
actions initiated within 45 days of the completion of a final existing	Target	Target
chemical risk evaluation.	100	100
(PM TSCA6a) Percentage of past TSCA new chemical substances decisions	FY 2022	FY 2023
with risk mitigation requirements reviewed.	Target	Target
•	5	25
(PM TSCA6b) Percentage of TSCA new chemical substances with risk	FY 2022	FY 2023
mitigation requirements reviewed for adherence/non-adherence with TSCA	Target	Target
Section 5 risk mitigation requirements that are determined to adhere to those requirements.		25

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$3,173.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$51,796.0 / +181.6 FTE) This increase enables EPA to develop and review data critical to existing chemical risk evaluation and risk management activities; update and develop 21st century information technology and data tools to meet the increasing demands; and begin to transform New Chemicals review into an efficient and sustainable process to complete cases in keeping with the statutory requirements. This investment includes \$32.035 million in payroll.
- (+\$4,736.0 / +11.0 FTE) This program change supports the implementation of the PFAS Strategic Roadmap. With these resources, EPA will fund the PFAS national testing strategy, review previous decisions on PFAS, establish a voluntary PFAS stewardship program, create/update IT infrastructure, and list and analyze new PFAS data. This investment includes \$1.936 million in payroll.

- (+\$2,528.0 / +3.0 FTE) This program change allows EPA to advance cumulative risk methodologies, which includes developing approaches for conducting aggregate exposure and cumulative risk assessments under TSCA that will be particularly important in evaluating high priority chemicals. This investment includes \$528.0 thousand in payroll.
- (+\$1,730.0 / +5.0 FTE) This program change provides regional capacity to carry out site-specific PCB "use" determinations, evaluating exposures and providing recommendations and specialized technical support to address the risks associated with PCBs legally and illegally "in use." These efforts will contribute to reduce risks and current exposures to workers and children, particularly in overburdened and underserved communities, and to advance agency commitments to EJ. This investment includes \$880.0 thousand in payroll.

Statutory Authority:

Toxic Substances Control Act (TSCA).

Toxic Substances: Lead Risk Reduction Program

Program Area: Toxics Risk Review and Prevention Goal: Ensure Safety of Chemicals for People and the Environment Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$11,991	\$13,129	\$13,749	\$620
Total Budget Authority	\$11,991	\$13,129	\$13,749	\$620
Total Workyears	63.0	62.9	62.9	0.0

Program Project Description:

EPA's Lead Risk Reduction Program contributes to the goal of reducing lead exposure and works toward addressing historic and persistent disproportional vulnerabilities of certain communities. ⁴⁷⁸ This program thereby plays an important role in achieving the Administration's goals to enhance environmental justice (EJ) and equity by:

- Establishing standards governing lead paint hazard identification and abatement practices;
- Establishing and maintaining a national pool of certified firms and individuals who are trained to carry out lead paint hazard identification and abatement practices and/or renovation, repair, and painting projects while adhering to the lead-safe work practice standards and minimizing lead dust hazards created in such projects; and
- Providing information and outreach to housing occupants and the public so they can make informed decisions and take actions about lead paint hazards in their homes.

Lead is highly toxic, especially to young children. Exposure to lead is associated with decreased intelligence, impaired neurobehavioral development, decreased stature and growth, and impaired hearing acuity. According to the Centers for Disease Control and Prevention (CDC), no safe blood lead level in children has been identified, and effects of lead exposure cannot be corrected. Arg, 480 Reducing exposure to lead-based paint (LBP) in old housing continues to offer the potential to significantly decrease blood lead levels in the largest number of children. Housing units constructed before 1950 are most likely to contain LBP. The most recent national survey estimated that 37.1 million homes in the U.S. have LBP and that 23.2 million homes have significant LBP hazards. Children living at or below the poverty line who live in older housing are at greatest risk. Additionally, some racial and ethnic groups and those living in older housing are

⁴⁷⁸ Childhood blood lead levels (BLL) have declined substantially since the 1970s, due largely to the phasing out of lead in gasoline and to the reduction in the number of homes with lead-based paint hazards. The median concentration of lead in the blood of children aged 1 to 5 years dropped from 15 micrograms per deciliter in 1976–1980 to 0.7 micrograms per deciliter in 2013–2014, a decrease of 95%. <u>See</u>, America's Children and the Environment (EPA, 2019), found at:

https://www.epa.gov/americaschildrenenvironment.

479 Centers for Disease Control and Prevention, Blood Lead Levels in Children, found at: http://www.edc.gov/nceh/lead/prevention/blood-lead-levels.htm.

http://www.cdc.gov/nceh/lead/prevention/blood-lead-levels.htm.

480 America's Children and the Environment (EPA, 2019), found at: https://www.epa.gov/americaschildrenenvironment.

⁴⁸¹ <u>See</u>, American Healthy Homes Survey, Lead and Arsenic Findings (HUD, 2011), found at: https://www.hud.gov/sites/documents/AHHS REPORT.PDF.

disproportionately affected by LBP. 482 Because of historic and persistent disproportional vulnerabilities of certain racial, low-income, and overburdened and underserved communities, the Lead Risk Reduction Program has the potential to create significant EJ gains and provides strategic opportunities to advance EPA's work in support of the Administration's goals to enhance EJ and equity as seen in the draft *Strategy to Reduce Lead Exposures and Disparities in U.S. Communities*. 483

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the FY 2022 – 2026 EPA Strategic Plan.

In FY 2023, EPA will conduct technical analyses and rulemaking efforts to address issues related to preventing childhood lead poisoning, including reviewing the definition of LBP; revising the dust-lead hazard standards (DLHS), the dust-lead clearance levels (DLCL), and the soil-lead hazard standards (SLHS); and continuing work to identify and subsequently address LBP hazards identified in public and commercial buildings. As a result of a May 2021 decision by the U.S. Court of Appeals for the Ninth Circuit, the DLHS, the definition of LBP, and the DLCL regulations have been identified by the Administration as rules to reconsider. FY 2023 funding will enable EPA to propose revisions to the DLHS and DLCL, while conducting activities necessary to revisit the definition of LBP and SLHS. In addition, EPA must continue work to evaluate whether hazards are created from renovations of public and commercials buildings (P&CBs). Reconsideration and development of these rulemakings will help ensure the most protective approaches are taken to reduce lead exposure in homes and child-occupied facilities, with benefits for overburdened and underserved communities where disproportionate impacts occur from LBP in support of the Administration's goals to enhance EJ and equity.

Renovation, Repair and Painting Program

In FY 2023, EPA will continue to implement the Renovation, Repair and Painting (RRP) Rule to address lead hazards created by renovation, repair, and painting activities in homes and child-occupied facilities and to advance EPA's EJ goals. Fourteen states and one tribe have been authorized to administer this program and rule. In the remaining non-authorized states, tribes, and territories, EPA will continue to accredit training providers, track training class notifications, and certify renovation firms. EPA also will assist in the development and review of state and tribal applications for authorization to administer training and certification programs, provide information to renovators and homeowners, provide oversight and guidance to all authorized programs, and disseminate model training courses for lead-safe work practices. As of January

 $^{^{482}}$ Among children ages 1 to 5 years in families with incomes below poverty level, the 95th percentile blood lead level (BLL) was 3.0 μg/dL, and among those in families at or above the poverty level, it was 2.1 μg/dL, a difference that was statistically significant. The 95th percentile BLL among all children ages 1 to 5 years was 2.5 μg/dL. The 95th percentile BLL in Black non-Hispanic children ages 1 to 5 years was 3.0 μg/dL, compared with 2.4 μg/dL for White non-Hispanic children, 1.8 μg/dL for Mexican-American children, and 2.7 μg/dL for children of "All Other Races/Ethnicities." The differences in 95th percentile BLL between race/ethnicity groups were all statistically significant, after accounting for differences by age, sex, and income. See America's Children and the Environment (EPA, 2019), found at: https://www.epa.gov/americaschildrenenvironment.

⁴⁸³ Draft Strategy to Reduce Lead Exposures and Disparities in U.S. Communities (EPA, 2021) found at https://www.epa.gov/system/files?file=documents/2021-11/updated-public-comment-draft-lead-strategy-11-16-2021.pdf.

⁴⁸⁴ For additional information, please visit: https://cdn.ca9.uscourts.gov/datastore/opinions/2021/05/14/19-71930.pdf.

2022, there were 308 accredited RRP training providers and more than 55,000 certified renovation firms. In FY 2021, about 33 percent of renovation firms with expiring certifications were recertified before their certifications expired.

DLHS, Definition of LBP, DLCL, and Public and Commercial Buildings (P&CBs)

In FY 2023, as noted above, EPA will review the DLHS/LBP and DLCL rules and continue analytical work to support the P&CB rule. These regulations, which reduce lead exposure, can aid in addressing historic and persistent disproportional vulnerabilities of certain racial, low-income, and overburdened and underserved communities, and can play an important role toward achieving the Administration's goals to enhance EJ and equity. The DLHS defines hazardous levels of lead in residential paint, dust, and soil, and post abatement clearance levels for lead in interior house dust.

In FY 2019, EPA revised the DLHS. ⁴⁸⁶ EPA also finalized its 2018 proposal to make no change to the definition of LBP. On January 7, 2021, the final DLCL rule reduced the amount of lead that can remain in dust on floors and windowsills after lead removal activities to better protect children from the harmful effects of lead exposure from 40 to 10 μg/ft² on floors, and 250 to 100 μg/ft² on windowsills. In accordance with the EO 13990 and consistent with a May 2021 court decision in the Ninth Circuit, ⁴⁸⁷ EPA has initiated a rulemaking to reconsider the DLHS and DLCL. Additionally, in light of a May 2021 court decision, EPA will revise the 2001 soil-lead hazard standards and revisit the definition of lead-based paint. The definition of lead-based paint is incorporated throughout the lead-based paint regulations, and application of this definition is central to how the lead-based paint program functions. EPA will, in collaboration with the Department of Housing and Urban Development (HUD), revisit the definition of LBP and, as appropriate, revise the definition to make it more protective. EPA is currently evaluating how best to move forward on this issue.

In FY 2023, EPA will continue to evaluate risk from renovations of public and commercial buildings pursuant to TSCA §402(c)(3), which directs EPA to promulgate regulations for renovations in target housing, public buildings built before 1978, and commercial buildings that create lead-based paint hazards. EPA will determine whether such renovations create LBP hazards and, if they do, EPA will address those hazards by promulgating work practice, training, and certification requirements for public and commercial buildings. Low-income, minority children are disproportionally vulnerable to lead exposure and therefore these efforts, as well as others that focus on reducing environmental lead levels, have the potential to create significant EJ gains.

Lead-Based Paint (LBP) Activities

In FY 2023, EPA will continue to implement the LBP Activities (Abatement, Risk Assessment, and Inspection) Rule by administering the federal program to review and certify firms and individuals and to accredit training providers. Ensuring that those who undertake LBP Activities are properly trained and certified is a critical aspect of federal efforts to reduce lead exposure and work towards addressing the historic and persistent disproportional vulnerabilities of certain racial, low-income, and overburdened and underserved communities. Additionally, the Agency will

⁴⁸⁶ For details on the revised rule, please visit: https://www.federalregister.gov/documents/2021/01/07/2020-28565/review-of-dust-lead-post-abatement-clearance-levels.

⁴⁸⁷ For additional information, please visit: https://cdn.ca9.uscourts.gov/datastore/opinions/2021/05/14/19-71930.pdf.

continue to review and process requests by states, territories, and tribes for authorization to administer the lead abatement program in lieu of the federal program. Thirty-nine states, four tribes, the District of Columbia, and Puerto Rico have been authorized to run the LBP abatement program.

Education and Outreach

In FY 2023 the Agency will continue to provide education and outreach to the public on the hazards of LBP, emphasizing compliance assistance and outreach to support implementation of the RRP rule and to increase public awareness about preventing childhood lead poisoning. The Program will continue to focus on reducing harm in communities disproportionately affected by lead exposure, including a focus on low income, overburdened, underserved, and tribal communities, and providing community leaders a means to educate their own communities about lead hazards and the importance of lead poisoning prevention. Finally, EPA will continue to provide support to the National Lead Information Center (NLIC) to disseminate information to the public.488

Performance Measure Targets:

(PM RRP30) Percentage of lead-based paint RRP firms whose certifications are scheduled to expire that are recertified before the expiration date.	FY 2022 Target	FY 2023 Target
	32	33

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

(+\$620.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

Statutory Authority:

Toxic Substances Control Act (TSCA), 15 U.S.C. 2601 et seq. – Sections 401-412.

⁴⁸⁸ For additional information, please visit: https://www.epa.gov/lead/forms/lead-hotline-national-lead-information-center.

Underground Storage Tanks (LUST/UST)

Program Area: Underground Storage Tanks (LUST / UST)
Goal: Safeguard and Revitalize Communities
Objective(s): Reduce Waste and Prevent Environmental Contamination

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$10,373	\$11,250	\$12,564	\$1,314
Leaking Underground Storage Tanks	\$9,561	\$9,470	\$9,811	\$341
Total Budget Authority	\$19,931	\$20,720	\$22,375	\$1,655
Total Workyears	88.1	91.6	95.6	4.0

Program Project Description:

Environmental Program Management (EPM) resources fund EPA's work in the Leaking Underground Storage Tank (LUST)/UST Program to help prevent releases of petroleum through activities such as inspection and compliance assistance support. The EPM LUST/UST Program provides states ⁴⁸⁹ and tribes with technical assistance and guidance, and by directly funding projects that assist states and tribes in their program implementation, such as the Tribal Underground Storage Tanks Database (TrUSTD). EPA is the primary implementer of the UST Program in Indian Country. With few exceptions, tribes do not have independent UST program resources. EPA will provide facility-specific compliance assistance for UST facility owners and operators in communities with environmental justice concerns in Indian country.

This program supports the Administration's priority of mitigating the negative environmental impacts to communities that are historically underserved, marginalized, and adversely affected by persistent poverty and inequality, as articulated in Executive Order 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*. ⁴⁹⁰ As of July 2021, approximately 53 million people lived within a quarter mile of an active UST facility, representing 16 percent of the total U.S population. These communities tend to be more minority and lower income than the U.S. population as a whole. ⁴⁹¹

In 2005, Congress passed the Energy Policy Act (EPAct) which, along with other release prevention measures, requires states to inspect facilities at least once every three years. EPA has

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⁴⁸⁹ States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.

 ⁴⁹⁰ For more information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.
 ⁴⁹¹ U.S. EPA, Office of Land and Emergency Management 2021. Data collected includes: (1) UST information as of late-2018 to

⁴⁹¹ U.S. EPA, Office of Land and Emergency Management 2021. Data collected includes: (1) UST information as of late-2018 to mid-2019 depending on the state from ORD & OUST, UST Map,

https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=b03763d3f2754461adf86f121345d7bc; and (2) population data from the 2015-2019 American Community Survey.

been supporting states in these efforts. Between 2008 and 2021, the number of annual confirmed releases has decreased by 33 percent (from 7,364 to 4,991). 492

A recent EPA study suggests that increased UST compliance is a result of increasing inspection frequency. EPA's statistical analysis, using the State of Louisiana's and Arkansas's UST data, showed a positive and statistically significant effect of increased inspection frequency on facility compliance. This evidence supports the data trends the Agency witnessed: compliance rates rose notably after fully implementing the three-year inspection requirement.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.2, Reduce Waste and Prevent Environmental Contamination in the FY 2022 - 2026 EPA Strategic Plan.

EPA estimates that only 2 percent of the Nation's 125,000 retail fuel locations have the appropriate equipment to store higher blends of ethanol, which means that the remaining UST systems will need some level of upgrade before they can safely and legally store E15. This poses a greater risk of having an accidental fuel release in nearby communities. To help address this, EPA is requesting additional resources to establish a targeted, national program to improve the compatibility of UST systems with E15 in fenceline communities where E15 is more prevalently used.

Requested resources will be used to:

- Conduct outreach and education to UST owners to ensure they both understand the regulatory requirements to store E15 and the technical process they can use to determine their compatibility in complying with those requirements so they can safely store E15; and
- Hire staff to support state inspection programs and to conduct direct E15 compliance inspections in Indian Country.

This investment is one part of a collective plan to support the use of E15, while protecting the surrounding communities and compliments investments being proposed in LUST Prevention and Research: Sustainable and Healthy Communities.

In FY 2023, EPA will continue to engage in the following core activities:

- Support enhanced inspections and evaluations for UST owners/operators to ensure that UST systems meet current regulations. This will include expanded development and use of a facility specific compliance assistance application for use in Indian Country.
- Develop tools and resources to assist states in adapting to the impacts of climate change and extreme weather events. This includes developing tools and resources to assist states in identifying facilities that are more prone to flooding or wildfires and helping these facilities prepare for these events before they occur.

⁴⁹³ Sullivan, K. A.; Kafle, A (2020). The Energy Policy Act of 2005: Increased Inspection Frequency and Compliance at Underground Storage Tank Facilities. OCPA Working Paper No. 2020-01.

⁴⁹² For more information, please refer to https://www.epa.gov/system/files/documents/2021-11/ca-21-34.pdf.

- Provide oversight for state LUST prevention grants and provide compatibility compliance assistance for tribal facilities.
- Continue research studies that identify the compatibility of new fuel formulations with current tank systems.
- Continue to coordinate with state UST prevention programs.
- Provide technical assistance, compliance help, and expert consultation to state, tribal, and stakeholders on both policy and technical matters. This support strives to strengthen the network of federal, state, tribal, and local partners (specifically communities and people living and working near UST sites) and assists implementation of the UST regulations.
- Provide guidance, training, and assistance to the regulated community to improve understanding and compliance.
- Continue to work with industry, states, and tribes to identify causes and potential solutions
 for corrosion in diesel tanks. Work in this area is important given the significant findings
 regarding the increasing prevalence of corrosion of UST system equipment containing
 ethanol or diesel fuels. 494

EPA will continue to collect data regarding both the compliance rate and the number of new releases for UST systems in Indian Country. The compliance rate will help determine progress toward meeting EPA's revised regulations and help identify any areas that need specific attention. In addition, EPA will continue its work to evaluate the effectiveness of its 2015 regulations, which are designed to ensure existing UST equipment continues to function properly.

Performance Measure Targets:

Work under this program supports performance results in the LUST Prevention Program under the LUST appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$344.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$970.0 / +4.0 FTE) This program change requests additional FTE to support the new fenceline communities program and to conduct direct E15 compliance inspections in Indian Country. Resources also will be used for the development and coordination of outreach materials to the regulated community. This investment includes \$705.0 thousand in payroll.

⁴⁹⁴ For more information, please refer to: www.epa.gov/ust/emerging-fuels-and-underground-storage-tanks-usts#tab-3.

Statutory Authority:

Resource Conservation and Recovery Act §§ 8001, 9001-9011.

Water Ecosystems

National Estuary Program / Coastal Waterways

Program Area: Protecting Estuaries and Wetlands Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$29,496	\$31,822	\$32,184	\$362
Total Budget Authority	\$29,496	\$31,822	\$32,184	\$362
Total Workyears	35.5	36.9	36.9	0.0

Program Project Description:

The National Estuary Program (NEP)/Coastal Waterways Programs work to restore the physical, chemical, and biological integrity of estuaries of national significance and coastal watersheds by protecting and restoring water quality, habitat, and living resources.⁴⁹⁵

The Nation's coasts are facing devastating ecological and societal stress now, and communities with environmental justice concerns, especially people of color, low-income, and Indigenous communities, are experiencing disproportionate climate impacts. Sea level rise and shoreline loss, dead zones, harmful algal blooms, coral bleaching, coastal acidification, wetland and habitat loss, shifts in species composition and habitat, frequent flooding, degraded water quality, and billion-dollar storms are becoming routine. The water quality and ecological integrity of estuarine and coastal areas is critical to the economic vitality of the U.S. While the estuarine regions of the U.S. comprise just 12.6 percent of U.S. land area, they contain 43 percent of the U.S. population and provide 49 percent of all U.S. economic output. ⁴⁹⁶ The economic value of coastal recreation in the U.S. – for beach going, fishing, bird watching, and snorkeling/diving – has been conservatively estimated by the National Oceanic and Atmospheric Administration to be in the order of \$20 billion to \$60 billion annually. ⁴⁹⁷ Wetlands also protect coastal property by absorbing storms, floods, and high waves. They stabilize shorelines and prevent land from eroding. The storm damage services provided by wetlands are valued at over \$23 billion dollars annually.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2023, EPA will provide \$19.6 million in Clean Water Act Section 320 grants for 28 NEPs (\$700 thousand per NEP). This is a highly leveraged program with projects that address coastal,

⁴⁹⁵ For more information, please visit https://www.epa.gov/nep.

⁴⁹⁶ For more information, please visit https://www.fisheries.noaa.gov/national/habitat-conservation/estuary-habitat.

⁴⁹⁷ For more information, please visit https://www.fisheries.noaa.gov/national/habitat-conservation/coastal-wetlands-too-yaluable-lose.

estuarine, and inland freshwater ecosystem needs. On average, NEPs leverage over \$20 for every dollar provided by EPA. This funding will strengthen EPA's staff and internal resource capacity to support and manage core NEP programmatic activities, including the implementation of the NEP Comprehensive Conservation and Management Plans, addressing findings from regular program evaluations of individual NEPs, oversight of the day-to-day operations of the NEPs, and management of Clean Water Act Section 320 grant funds. The FY 2023 funding will provide capacity to support NEP programs that address priority issues such as nutrient management, habitat protection and restoration, water quality, and climate adaptation and resiliency. In addressing climate issues, NEPs will assess climate change vulnerabilities, develop and implement adaptation and resiliency strategies, engage and educate stakeholders, and implement collaborative projects with regional, state, and local partners. Funding also will support the NEPs in developing the skills and capacity to integrate environmental and climate justice into their guiding documents and daily operations. The FY 2023 request includes \$2 million for the NEP Coastal Watersheds Grant program. FY 2023 funding will be used to reinvigorate the Climate Ready Estuaries (CRE) program⁴⁹⁸ and other important coastal program activities. CRE provides technical support to NEPs and other coastal community leaders and advises on climate resiliency nationally. EPA also will continue to work with other federal agencies, states, and tribes to assess ocean and coastal acidification and identify opportunities to implement actions to mitigate the effects of acidification.

EPA continues to work with states, tribes, trust territories, NEPs, and other Federal agencies to implement the National Aquatic Resource Survey (NARS) in coastal/estuarine waters. In FY 2022, the NARS coastal survey will complete processing of samples collected during FY 2021 and provide validated sample results to partners. Analysis and interpretation of the sample results will be used for the next National Coastal Condition Report targeted for publication in FY 2023.

EPA, as the federal chair of the Gulf Hypoxia Task Force, will work with other task force member federal agencies and twelve member states to continue implementation of the 2008 Gulf Hypoxia Action Plan. This activity complements other coordination and implementation resources in the Geographic Program: Gulf of Mexico and Surface Water Protection Program. A key goal of the Gulf Hypoxia Action Plan is to improve water quality in the Mississippi River Basin and reduce the size of the hypoxic zone in the Gulf of Mexico by implementing existing and innovative approaches to reduce nitrogen and phosphorus pollution in the Basin and the Gulf. Hypoxia Task Force member states are implementing their nutrient reduction strategies, partnering with land grant universities, reporting on measures to track progress, and identifying a need for adaptive management., while the Task Force is developing basin-wide metrics. Excessive nutrients can have both ecological and human health effects. For example, high nitrate levels in drinking water have been linked to serious illness. In addition to the public health risks, there are considerable economic costs from impaired drinking water. State support for effective nutrient reduction in the

<u>&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL</u>.

⁴⁹⁸ For more information, please visit: https://www.epa.gov/cre.

⁴⁹⁹ For more information, please visit:

https://nepis.epa.gov/Exe/ZyNET.exe/P100U1TD.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2006+Thru+2010&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C06thru10%5CTxt%5C00000039%5CP100U1TD.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&

Gulf will be coordinated with other Hypoxia Task Force federal member agencies, such as the U.S. Department of Agriculture and U.S. Geological Survey, in high-priority watersheds.

Performance Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$296.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$66.0) This program change is an increase of resources to support the restoration of the water quality and ecological integrity of estuaries of national significance.

Statutory Authority:

2021 Protect and Restore America's Estuaries Act; 1990 Great Lakes Critical Programs Act of the Clean Water Act; Great Lakes Legacy Reauthorization Act of 2008; Clean Water Act Section 320; Estuaries and Clean Waters Act of 2000; Protection and Restoration Act of 1990; North American Wetlands Conservation Act; Water Resources Development Act; 2012 Great Lakes Water Quality Agreement; 1987 Montreal Protocol on Ozone Depleting Substances; 1909 Boundary Waters Treaty.

Wetlands

Program Area: Protecting Estuaries and Wetlands Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$18,562	\$19,300	\$25,637	\$6,337
Total Budget Authority	\$18,562	\$19,300	\$25,637	\$6,337

Program Project Description:

EPA's Wetlands Protection Program has two primary components: 1) the Clean Water Act (CWA) Section 404 regulatory program and 2) the state and the tribal wetland development program. Major activities of the Wetlands Protection Program include timely and efficient review of CWA Section 404 permit applications submitted to the United States Army Corps of Engineers (USACE) or authorized states; engaging and partnering with USACE, states, and other stakeholders to develop stream and wetland assessment tools, and improving compensatory mitigation effectiveness and availability of credits; assisting in the development of state and tribal wetlands protection and restoration programs under CWA; and providing technical assistance to the public on wetland management and legal requirements.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*. In FY 2023, EPA is requesting an additional \$6.3 million and 21.6 FTE to build back core capacity to support EPA's state and tribal partners through enhancing their wetlands protection programs.

Working with federal, state, tribal, and local partners, EPA will strive to ensure an effective, consistent approach to wetlands protection, restoration, and permitting. To achieve this goal, the Agency will continue its collaborative relationship with the USACE in the CWA Section 404 permitting program and continue its work with states and tribes to build their wetlands programs to monitor, protect, and restore wetlands to achieve multiple societal benefits, including adapting and mitigating the effects of climate change.

CWA Section 404

Section 404 of the CWA is an established program to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. USACE is responsible for managing the day-to-day permit processes nationwide under CWA Section 404. ⁵⁰⁰ EPA engages in the CWA

⁵⁰⁰ Currently three states, Michigan, New Jersey, and Florida have assumed the CWA Section 404 permit program. CWA Section 404(g) gives states and tribes the option of assuming, or taking over, the permitting responsibility and administration of CWA Section 404 permit program for certain waters.

404 permit process to ensure compliance with the CWA Section 404(b)(1) guidelines as the permitting authority formulates their proposed permits. In 2008, EPA and USACE issued a final rule governing compensatory mitigation for activities authorized by the CWA 404 and associated losses of aquatic resources. The current regulation prescribes a review and approval process for the establishment and management of mitigation banks and in-lieu of fees program. EPA and USACE will continue to work together to evaluate the effectiveness of the program, provide training to regulators and the public, and consider further enhancements to the rule and program.

In FY 2023, EPA will support the development of stream and wetland assessment methods, trainings for regulators, and regional crediting protocols for compensatory mitigation to improve the efficiency and environmental outcomes of federal and state agency review. In addition, EPA and USACE will continue improving efficiencies in federal CWA Section 404 permitting that would help reduce potential costs and delays; increasing consistency and predictability; improving protection of public health and the environment, including assessing climate impacts and impacts to disadvantaged communities; and ensuring permit decisions are legally defensible.

EPA also will continue carrying out its responsibilities as a member of the Gulf Coast Ecosystem Restoration Council authorized under the Resources and Ecosystem Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States (RESTORE) Act, and as a Natural Resource Damage Assessment (NRDA) Trustee for the Deepwater Horizon oil spill under the Oil Pollution Act (OPA). Under CWA Section 404, the RESTORE Act, and OPA, EPA's responsibilities include timely, environmentally sound, and compliant implementation of National Environmental Policy Act (NEPA) review and associated permitting. Under NRDA, EPA is a cooperating or lead federal agency for NEPA on all Deepwater Horizon Trustee Implementation Group restoration plans and ensures the appropriate level of NEPA analysis is integrated into those referenced restoration plans. EPA's RESTORE responsibilities include NEPA analysis for projects that the Council assigns to EPA. As a NRDA Trustee, EPA undertakes mandatory independent third-party financial audits every three years to ensure accountability regarding the use of funds provided under a 2016 consent decree. The first independent third-party financial audit was initiated in FY 2018 and concluded in FY 2020 with no negative findings. The second audit is underway and will conclude in FY 2022.

Building State and Tribal Wetlands Programs

EPA will continue to work with states and tribes to target Wetlands Protection Program funds to core statutory requirements while providing states and tribes flexibility to best address their priorities. This includes providing assistance to states and tribes interested in assuming administration of the CWA Section 404 program. EPA intends to propose a rule in FY 2023 to update the existing assumption regulations and provide greater clarity to state and tribes on what waters may be assumed. The Agency anticipates taking final action in FY 2024. EPA also will continue to administer Wetlands Program Development grants in support of state and tribal wetlands programs. The Agency will focus on working more efficiently with states and tribes to achieve specific program development outcomes including protecting and restoring wetlands to address climate impacts and supporting state and tribal assumption of the CWA Section 404 program. ⁵⁰²

⁵⁰¹ For more information, please see: https://www.epa.gov/sites/production/files/2016-02/documents/deepwaterhorizon-cd.pdf.

⁵⁰² For more information, please see: https://www.epa.gov/wetlands.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$864.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$5,473.0 / +21.6 FTE) This program change is an increase of resources and FTE to support the implementation of the Clean Water Act to protect and restore wetlands. This investment includes \$3.569 million in payroll.

Statutory Authority:

CWA § 404.

Water: Human Health Protection

Beach / Fish Programs

Program Area: Ensure Safe Water Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$1,146	\$1,584	\$1,827	\$243
Total Budget Authority	\$1,146	\$1,584	\$1,827	\$243
Total Workyears	1.7	3.2	3.8	0.6

Program Project Description:

The Beach/Fish Program provides up-to-date science, guidance, technical assistance, and nationwide information to state, tribal, and federal agencies to protect human health of beach goers from contaminated recreation waters, as well as recreational and subsistence fishers (*e.g.*, tribal communities and other underserved populations) from consumption of contaminated fish.

The Agency implements the following activities under this program:

- Develop and disseminate methodologies and guidance that states and tribes use to sample, analyze, and assess fish tissue in support of waterbody specific or regional consumption advisories.
- Develop and disseminate guidance that states and tribes can use to conduct local fish consumption surveys.
- Develop and disseminate guidance that states and tribes can use to communicate the risks of consuming chemically contaminated fish.
- Gather, analyze, and disseminate information to the public and health professionals that informs decisions on when and where to fish, and how to prepare fish caught for recreation and subsistence.
- Provide best practices on public notification of beach closures and advisories.
- Develop tools such as the sanitary survey app, predictive modeling, and improved analytical methods.
- Maintain the E-Beaches IT system to collect data required by the BEACH Act.

In addition to providing technical support to states and tribes on beach monitoring and data reporting, these programs are part of EPA's ongoing effort to increase public awareness of the risks to human health associated with contact with recreational water contaminated with pathogens and Harmful Algal Blooms and with eating locally caught fish with pollutants such as mercury, PCBs, or PFAS, at levels of concern. These efforts are directly linked to the Agency's mission to protect human health.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2023, EPA will continue to:

- Update science and public policy to assess and manage the risks and benefits of fish consumption.
- Provide analytical tools and collect data associated with beach monitoring.
- Provide technical support to states in the operation of their fish consumption advisories and beach monitoring programs, including revision of recommended target analytes per the Agency's PFAS Roadmap.
- Build program capacity, particularly in areas related to environmental justice, water infrastructure support and oversight, climate change resilience, and regulatory reviews.
- Per the Agency's PFAS Roadmap, complete human biomarker report on PFAS in blood serum and relationship with consumption of fish.
- Per the Agency's PFAS Roadmap, conduct analysis and data reporting for contaminants including PFAS for the first time in a national lake study, as a human health indicator.

In FY 2023, EPA also will make investments in providing up-to-date science, guidance, and technical assistance so states and tribes have equitable and effective beach and fish advisory programs. This allows the public, including underserved communities, to make informed choices about recreational activities in local waters and eating locally caught fish. EPA will upgrade the E-Beaches IT system.

Performance Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$30.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$213.0 / +0.6 FTE) This program change is an increase of resources and FTE to build program capacity, particularly in areas related to environmental justice, water infrastructure support and oversight, climate change resilience, and regulatory reviews. This investment includes \$115.0 thousand in payroll.

Statutory Authority:

Clean Water Act, § 101, 104, and 303.

Drinking Water Programs

Program Area: Ensure Safe Water Goal: Ensure Clean and Safe Water for All Communities Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$97,190	\$106,903	\$133,258	\$26,355
Science & Technology	\$4,088	\$4,364	\$6,776	\$2,412
Total Budget Authority	\$101,278	\$111,267	\$140,034	\$28,767
Total Workyears	480.3	475.2	547.2	72.0

Program Project Description:

Safe drinking water is critical for protecting human health and the economic vitality of the Nation. Approximately 320 million Americans rely on public water systems to deliver safe tap water that complies with national drinking water standards.⁵⁰³ EPA's Drinking Water Program is based on a multiple-barrier and source-to-tap approach to protect public health from contaminants in drinking water.⁵⁰⁴ EPA protects public health through:

- Source water assessment and protection;
- Promulgation of new or revised National Primary Drinking Water Regulations (NPDWRs);
- Training, technical assistance, and financial assistance programs to enhance public water system capacity to comply with regulations and provide safe drinking water;
- Underground injection control (UIC) programs;
- Support for implementation of NPDWRs by state and tribal drinking water programs through regulatory, non-regulatory, and voluntary programs and policies; and
- Resources and tools for states and tribes to support the financing of water infrastructure improvements, that are more resilient to threats, human threats like cyber-attacks and natural hazards such as climate change.⁵⁰⁵

Current events, including the detection of lead and per- and polyfluoroalkyl substances (PFAS) in drinking water, highlight the importance of drinking water protection programs that safeguard public health. It is particularly important to prioritize threats and protect the sources of drinking water from those threats. Moreover, the detection of lead and PFAS, such as perfluorooctanoic acid (PFOA), perfluorooctane sulfonate (PFOS), and GenX chemicals, exemplifies the increased demand for risk communication and other resources that can help communities protect public health and address these chemicals.

⁵⁰³ For more information on the U.S. Environmental Protection Agency Safe Drinking Water Information System (SDWIS/FED), please see: http://water.epa.gov/scitech/datait/databases/drink/sdwisfed/index.cfm.

please see: http://water.epa.gov/scitech/datait/databases/drink/sdwisfed/index.cfm.

504 For more information, please see: https://www.epa.gov/sites/production/files/2015-10/documents/guide swppocket 2002 updated.pdf.

⁵⁰⁵ For more information, please see: https://www.epa.gov/ground-water-and-drinking-water.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the program will support the Agency's national drinking water priorities and implementation of the Infrastructure Investment and Jobs Act of 2021(IIJA), including:

- addressing lead and emerging contaminants such as PFAS;
- improving resilience in drinking water systems, to address natural hazards, including climate change, and human threats by enhancing cybersecurity; and,
- improving drinking water and water quality across the Nation, especially in rural, small, underserved, and disadvantaged communities across the country.

In FY 2023, EPA's requested additional resources will support the development and/or implementation of regulatory activities, including:

- developing the new regulation, Lead and Copper Rule Improvements;
- promulgating a PFAS drinking water rule, including public outreach activities; and,
- conducting PFAS monitoring under the fifth cycle of the Unregulated Contaminant Monitoring Rule (UCMR), consistent with EPA's PFAS Strategic Roadmap.

Collectively, additional resources for these efforts will support community engagement activities and help local communities ensure their residents have access to safe drinking water.

The Agency will continue to improve the effectiveness and efficiency of its programs for states and tribes, including work to ensure EPA water programs and resources reach communities that too often have been left behind, including rural and tribal communities. The Drinking Water Program supports this effort by providing training and assistance to state drinking water programs, tribal drinking water officials, and technical assistance providers. The training includes:

- achieving and maintaining compliance at drinking water systems;
- developing and amplifying best practices;
- strengthening state and tribal program capacity; and,
- certifying drinking water operators and maintaining an essential workforce.

The Agency will continue to provide funding to states to assist underserved, small and disadvantaged communities with Safe Drinking Water Act (SDWA) compliance, and providing households access to drinking water services and household water quality testing, including unregulated contaminants.

EPA is overseeing state drinking water programs by completing the annual public water system supervision program review for each primacy agency as required under SDWA. The Agency is also continuing to modernize the Safe Drinking Water Information System for states (SDWIS-State). Information gained during the program reviews, which occur throughout the year, includes an analysis of the completion of sanitary surveys by the primacy agency and an evaluation of whether the primacy agency is implementing its programs in accordance with SDWA. The annual program reviews directly support the work of the states and the Agency to reduce the number of community water systems still in noncompliance with health-based standards. As of January 2022,

more than 2,880 systems have returned to compliance since 2017. EPA continues to work with states towards long-term remediation of health-based system violations. The information gained from the reviews and the SDWIS modernization efforts also support evidence-building activities as part of EPA's implementation of the Foundations for Evidence-Based Policymaking Act of 2018 (Evidence Act). The Agency also continues to work with states on:

- maintaining their capacity development programs and providing resources and tools to assist water systems with SDWA compliance;
- effectively coordinating with Public Water System Supervision (PWSS) programs; and,
- providing operator certification programs to support the water sector workforce.

Water Infrastructure

Infrastructure investment is essential as the Nation's aging infrastructure poses a significant challenge for the drinking water and wastewater sectors to protect public health and the environment. These challenges are particularly pressing in small, rural, overburdened, and underserved communities. In FY 2023, EPA will continue to support funding of the Nation's drinking water infrastructure, including infrastructure needs and assistance for disadvantaged and tribal communities. The Agency also will support activities to leverage and encourage public and private collaborative efforts and investments. This Program also supports the Agency's efforts in implementing the IIJA. EPA will focus on helping disadvantaged communities access the funding provided by IIJA.

EPA will continue to work on the seventh Drinking Water Infrastructure Needs Survey, which EPA expects to release in early 2023. This survey provides a 20-year capital investment need for public water systems that are eligible to receive funding from state Drinking Water State Revolving Fund (DWSRF) programs. The survey also informs the DWSRF allocation formula as required under SDWA.

In addition to the DWSRF Program, in FY 2023 EPA will continue to support drinking water infrastructure programs by implementing the following statutes:

- the Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) within IIJA;
- Water Infrastructure Improvements for the Nation Act of 2016 (WIIN);
- America's Water Infrastructure Act of 2018 (AWIA); and,
- The Water Infrastructure Finance and Innovation Act of 2014 (WIFIA).

Collectively, these laws strengthened existing programs and created new ones to tackle significant public health concerns and environmental needs. The programs created in these laws are vital to protecting public health, continuing to grow the United States' economy, and ensuring that rural and urban communities from coast-to-coast can thrive. EPA will continue to provide WIIN, AWIA, and IIJA grant funding for drinking water lead reduction projects and to enhance water system resiliency to natural hazards such as climate change and man-made threats such as cybersecurity, with a focus on small and disadvantaged communities.

Funding for infrastructure supports EPA's goal to increase the cumulative amount of non-federal dollars leveraged by water infrastructure finance programs by \$9 billion in FY 2023. These water infrastructure finance programs include the Clean Water State Revolving Fund, DWSRF, and the WIFIA program. Over \$22.3 billion has been leveraged in FY 2020 and FY 2021.

Drinking Water Program Implementation

In FY 2023, the Agency will continue to work with states to implement requirements for all NPDWRs to ensure that systems install, operate, and maintain appropriate levels of treatment and effectively manage their drinking water plants and distribution systems. The program activities are designed to improve drinking water and water quality across the Nation, especially in tribal and underserved and vulnerable communities. Activities include:

- Working with states to provide training and resources to replace lead service lines and optimize corrosion control treatment, develop other strategies to minimize exposure to lead, and maintain simultaneous compliance;
- Developing guidance, tools, and trainings to support water systems and primacy agencies in implementing the Lead and Copper Rule;
- Developing regulations to improve the clarity, readability, and accuracy of information in Consumer Confidence Reports;
- Developing regulations to implement SDWA Section 1414 requirements allowing states to mandate water system restructuring assessments; and,
- Focusing on the reduction of the number of community water systems with health-based violations, especially small systems, tribal systems, and systems in underserved communities.

EPA will continue the development of modernized SDWIS-State and support state migration to the Compliance Monitoring Data Portal, which enables drinking water utilities and laboratories to report drinking water data electronically. In addition, EPA will continue the development of efficient program data management and reporting tools focusing on drinking water regulation, system technical, managerial, and financial capacity, and activities that inform status of SDWA compliance and decisions to support human health protection.

In FY 2023, EPA will conduct the following activities to facilitate compliance with drinking water rules:

- Overseeing the national PWSS Program by administering grants to states and measuring program results based on state reporting of health-based rule violations at public water systems for over 90 drinking water contaminants;
- Offering training and technical assistance to states, tribes, and public water systems, especially those in underserved and disadvantaged communities, with a priority on addressing significant noncompliance with the NPDWRs;
- Bolstering its strong partnership with the states to provide small system technical assistance, especially in disadvantaged communities, with a focus on compliance with rules, operational efficiencies, and system sustainability to ensure public health protection;
- Directly implementing the Aircraft Drinking Water Rule, designed to protect millions of people who travel on approximately 5,700 aircraft in the United States annually; and,
- Directly implementing the Drinking Water Program where states and tribes do not have primacy (e.g., Wyoming, the District of Columbia, and tribal lands excluding the Navajo Nation).

In FY 2023, EPA is requesting an additional \$185,000 and 1 FTE to augment its efforts to implement the Evidence Act. This Administration is committed to making evidence-based decisions guided by the best available science and data. These resources will help develop statistical evidence where it is lacking and improve EPA's capacity to generate and share science and data, and use it in policy, budget, operational, regulatory, and management processes and decisions. Specifically, the Agency will be conducting evidence-building activities and gathering information from SDWIS and the Compliance Monitoring Data Portal that inform the data quality of the Agency's drinking water compliance information. EPA will pilot a compliance verification tool to directly analyze state compliance data and compare it to reported violations. Through these efforts, EPA expects to identify additional data needs, potential sources of additional information, and mechanisms to fill data gaps. EPA also will identify system characteristics that support compliance and those that cause compliance challenges. EPA will use these findings to inform and develop policy instruments.

Drinking Water Standards

To assure the American people that their water is safe to drink, EPA's drinking water regulatory program monitors for a broad array of contaminants, evaluates whether contaminants are a public health concern, and regulates contaminants when there is a meaningful opportunity for health risk reduction for persons served by public water systems. In FY 2023, the Agency also will address drinking water risks with the following actions:

- Continuing to develop the new regulation, Lead and Copper Rule Improvements (LCRI), announced by EPA on December 16, 2021, to better protect communities from exposure to lead in drinking water. In FY 2021, EPA announced the delay of the effective date of the Lead and Copper Rule Revisions (LCRR) until December 16, 2021, and the compliance date to October 16, 2024. The delay in the effective date is consistent with presidential directives issued on January 20, 2021, to the heads of federal agencies to review certain regulations, including the LCRR (Executive Order 13990.)⁵⁰⁶ Following the Agency's review of the LCRR under Executive Order 13990, EPA concluded that the rule should go into effect because it provides improved protections of public health. EPA also concluded there are significant opportunities to improve the rule to support the overarching goal of proactively removing lead service lines and more equitably protecting public health.
- Conducting human health effects assessments for water contaminants to support SDWA actions, including the derivation of maximum contaminant level goals, drinking water health advisories, and human health benchmarks. Consideration of those potentially most at risk especially sensitive subpopulations and critical life stages (e.g., infants and children) is key in development of health effects assessments for contaminants in water.
- After a thorough review in accordance with the Administration's executive orders and
 other directives, EPA reissued the final regulatory determination to regulate PFOA and
 PFOS in drinking water on February 22, 2021 without substantive change. In FY 2021,
 EPA began the process to establish enforceable limits for two PFAS chemicals, PFOA and
 PFOS, under SDWA. EPA intends to propose NPDWRs for PFOA and PFOS in FY 2023,
 supported by: health effects assessments/science; external consultations; peer reviews. and

⁵⁰⁶ For additional information, please see: https://www.federalregister.gov/documents/2021/01/25/2021-01765/protecting-public-health-and-the-environment-and-restoring-science-to-tackle-the-climate-crisis

other work being undertaken in FY 2022. EPA also will begin to respond to public comments; conduct additional analyses (if needed) in response to public comments; conduct stakeholder engagement activities; and revise support documents and draft the final regulation.

- After the expected completion of the final fifth Contaminant Candidate List (CCL 5) in FY 2022, EPA will begin developing the SDWA-mandated draft Regulatory Determinations for the CCL 5.
- Continuing to participate in interagency actions and support cross-agency efforts to address PFAS; better understand the health impacts and extent of their occurrence in the environment and resulting human exposures; and support priorities identified by the EPA Council on PFAS.
- Developing drinking water health advisories for PFAS with final toxicity values, including GenX chemicals and PFBS (anticipated in Spring 2022), and updated health advisories for PFOA and PFOS as quickly as possible following Science Advisory Board review of the toxicity values.
- Continuing to develop risk communication and other tools to support states, tribes, and localities in managing PFAS and other emerging contaminants in their communities.
- Continuing to conduct analyses in support of the fourth six-year review of existing NPDWRs, utilizing state data for regulated contaminants collected between 2012-2019.
- Continuing to support state and tribal efforts to manage cyanotoxins in drinking water, including providing technical assistance.
- Continuing to conduct technical analyses, develop draft technical support documents and other materials, and form and support a focused National Drinking Water Advisory Council workgroup seeking input and advice to support revisions to the existing Microbial and Disinfection Byproducts Rules.
- Beginning PFAS monitoring under UCMR 5, conducting occurrence analyses, and providing support to drinking water systems and laboratories as they collect and analyze samples during implementation.
- Collecting Community Water System Survey data to capture changes in the conditions of public water systems that have taken place in water systems over the past 16 years.

Source Water Protection

SDWA requires drinking water utilities that meet the definition of a public water system to meet requirements for source water protection set by EPA and state primacy agencies. Protecting source water from contamination helps reduce treatment costs and may avoid or defer the need for complex treatment. EPA will continue to partner with states, federal counterparts, drinking water utilities, and other stakeholders to identify and address current and potential threats to sources of drinking water. In FY 2023, the Agency will be:

• Continuing to develop data-layers and decision support tools to assist source water assessment, planning, and emergency preparation including updates to the Drinking Water Mapping Application for Protecting Source Waters (DWMAPS) on EPA's web-based geospatial platform, *GeoPlatform*. 507

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⁵⁰⁷ For more information, please see: https://www.epa.gov/sourcewaterprotection/dwmaps.

- Working with state, federal, utility, and local stakeholders to leverage resources, support
 efforts to assist communities in source water protection activities and projects, and promote
 ongoing efforts to protect drinking water sources.
- Continuing to partner with the Department of Agriculture (USDA)'s Natural Resources
 Conservation Service and Forest Service, and state partners to support implementation of
 the source water protection provisions of the Agriculture Improvement Act of 2018 (2018
 Farm Bill). This presents an opportunity to forge stronger connections between EPA and
 USDA to address agriculture-related impacts to drinking water sources.
- Continuing to provide support for workshops that promote source water protection at the local level and support the integration of source water protection into related programs at the state and federal levels, focusing on reducing nutrient pollution impacts on drinking water sources.
- Working with stakeholders to implement source water protection provisions mandated by AWIA. EPA will support the implementation of the AWIA revisions to the Emergency Planning and Community Right-to-Know Act as it relates to notification of releases of hazardous chemicals that potentially affect source water. In addition, the Agency will support community water systems having access to hazardous chemical inventory data.
- Continuing to serve as an expert on sources of emerging drinking water contaminants and options for limiting or preventing such contamination through source water protection and integration of SDWA and Clean Water Act (CWA), particularly through development and implementation of ambient water quality criteria for the protection of human health.
- Supporting the development of outreach and training materials on incorporating source water protection into asset management to further the concept that source water protection is an integral part of the overall planning and management of a utility.

Underground Injection Control

Roughly one-third of the United States' population is served by public water systems that receive water from ground water. To safeguard current and future underground sources of drinking water from contamination, the UIC Program regulates the use of injection wells that place fluids underground for storage, disposal, enhanced recovery of oil and gas, and minerals recovery. Protecting ground water requires proper permitting, construction, operation, and closure of injection wells. In FY 2023, activities in the UIC Program include:

- Working with the Ground Water Protection Council, Interstate Oil and Gas Compact Commission, and the National Rural Water Association to identify best practices in oil and gas development, such as reuse and recycling of produced water, that can help safeguard public health.
- Supporting the Administration's efforts to tackle the climate crisis and implementing the Drinking Water and Wastewater Infrastructure Act of 2021 to support comprehensive carbon dioxide infrastructure in the United States, by working with permit applicants on Class VI permits for secure geologic storage of carbon dioxide and with state UIC programs seeking to obtain state primacy for the Class VI program.
- Working with authorized state and tribal agencies in their efforts to effectively manage Class II enhanced oil and gas recovery wells and oil and gas-related disposal wells.
- Supporting states and tribes in applying for primary enforcement responsibility and implementing UIC Program revisions.

- Continuing to provide technical assistance, tools, and strategies to states to improve implementation of UIC programs, including development of e-learning material.
- Using national UIC data to assist with promoting consistent approaches to program oversight of state and EPA's UIC programs.
- Developing tools to support permitting in direct implementation and state implementation of the Class VI program.
- Streamlining EPA's UIC direct implementation permitting process and reducing the permit application backlog.

Water Sector Cybersecurity

Based on recent cyber-attacks on water systems, EPA requests \$400,000 and 2 FTE to administer the new Water Sector Cybersecurity Grant in FY 2023. This new competitive grant will be targeted toward cybersecurity infrastructure needs within the water sector.

Water Reuse

To assure a safe and reliable source of water that is resilient to drought, flooding, and population growth, EPA is working to advance the consideration of water reuse nationwide. This work is being done in collaboration with a broad group of stakeholders including non-governmental organizations, states, tribes, and local governments. In FY 2023, EPA will continue to support the National Water Reuse Action Plan. The Agency will develop and pursue actions that prioritize advancing technical and scientific knowledge on water reuse to ensure its safety across a range of uses and applications. EPA also will pursue actions in the Plan that provide financial tools for stakeholders to ensure the accessibility of water reuse. ⁵⁰⁸

One Water/One Community

EPA will coordinate CWA and SDWA investments toward historically underserved and overburdened communities that are facing greater climate and water equity challenges to achieve greater resilience, access to clean and safe water, and an improved quality of life. This program will provide holistic support to communities as they respond to the climate crisis by increasing funding for planning and implementation actions across the country. Additionally, EPA will work with tribes to meet the unique needs of their communities.

Performance Measure Targets:

(PM DW-02) Number of community water systems still in noncompliance FY 2022 FY 2023 with health-based standards since March 31, 2021. Target Target 640 590 FY 2022 FY 2023 (PM DWT-02) Number of community water systems in Indian Country still in noncompliance with health-based standards since March 31, 2021. Target **Target** 100 90

⁵⁰⁸ For more information, please see https://www.epa.gov/waterreuse.

(PM DW-07) Number of drinking water and wastewater systems, tribal and	FY 2022	FY 2023
state officials, and water sector partners provided with security, emergency	Target	Target
preparedness, and climate resilience training and technical assistance.	2,000	2,000

(PM INFRA-06) Number of tribal, small, rural, or underserved	FY 2022	FY 2023
communities provided with technical, managerial, or financial assistance to	Target	Target
improve system operations.	339	448

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$3,936.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$10,255.0 / +51.8 FTE) This program change is an increase in resources and FTE to support regulatory analysis, development and training, technical assistance for state, tribal, and local communities to address drinking water contaminants (including Lead and PFAS) in their efforts to ensure safe and affordable drinking water. This increase also supports development of the LCRR and the UCMR. This investment also includes \$9.054 million in payroll.
- (+\$4,843.0 / +7.2 FTE) This program change is an increase in resources and FTE to support coordinated community assistance work in support of the One Water/One Community initiative and the Environmental Finance Centers. This investment also includes \$1.259 million in payroll.
- (+\$5,736.0/+3.0 FTE) This program change is an increase in resources and FTE to support the implementation of the Agency's *PFAS Action Plan*, including development of the PFAS regulation, UCMR implementation, and the CCL. This investment also includes \$524.0 thousand in payroll.
- (+\$1,000.0 / +2.0 FTE) This program change is an increase in resources and FTE to support the implementation of the Agency's lead action plan including work on the LCRI. This investment also includes \$350.0 thousand in payroll.
- (+\$400.0 / +2.0 FTE) This program change is an increase in resources and FTE to implement the new water sector cybersecurity grant program. This investment also includes \$350.0 thousand in payroll.
- (+\$185.0 / +1.0 FTE) This program change is an increase in resources and FTE to support the activities associated with the Evidence Act. This investment also includes \$175.0 thousand in payroll.

Statutory Authority:

SDWA; CWA.

Water Quality Protection

Marine Pollution

Program Area: Ensure Clean Water Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$8,206	\$9,468	\$12,299	\$2,831
Total Budget Authority	\$8,206	\$9,468	\$12,299	\$2,831
Total Workyears	29.7	31.8	38.0	6.2

Program Project Description:

EPA's Marine Pollution Program: 1) aims to reduce marine litter in our waterways and communities in coastal regions and on major river systems, improve trash capture activities across the country, and supports the Trash Free Waters Program; 2) addresses incidental discharges under the Clean Water Act Section 312; and 3) protects human health and the marine environment from pollution caused by dumping by implementing the Marine Protection, Research and Sanctuaries Act (MPRSA) and supports the Ocean Dumping Management Program.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*. To support this work, additional resources totaling \$2.8 million and 6.2 FTE are requested in FY 2023 to fund fixed cost increases and build core program capacity.

Trash Free Waters Program. The FY 2023 request includes resources and FTE to support trash capture and prevention programs across the United States tied to water quality and waste management goals and to implement activities under the Save Our Seas 2.0 Act. This program provides support to states and municipalities in coastal regions and on major river systems, with a special focus on lower-income areas with environmental justice concerns.

FY 2023 funding will allow the Program to:

- support the installment of trash capture systems in stormwater conveyance systems and in waterways using technologies that are cost-effective and that have high trash-removal efficiencies;
- provide assistance on integrating trash prevention provisions into municipal stormwater management permits and practices, as well as broader watershed plans;
- aid targeted source reduction efforts;
- promote appropriate protocols for trash monitoring efforts;
- research and address microplastics (including microfibers) in waterways;
- engage in comprehensive outreach and education efforts for trash reduction; and,

validate and replicate the most effective tools, projects, metrics, and partnerships across
the Nation for subsequent application in locations within the United States and in countries
with the greatest need.

The Trash Free Waters program has been able to increase the number of place-based projects year by year through active engagement with partners. Since 2013, over 280 Trash Free Water projects have been undertaken with EPA assistance, public education and outreach, research, and regional program planning. EPA will continue to work with its partners to advance this initiative in FY 2023.

Vessels Program. In December 2018, the Vessel Incidental Discharge Act (VIDA) was signed into law establishing a new framework for the regulation of discharges incidental to the normal operation of vessels. EPA is reviewing and considering public comments on the proposed rule to set national performance standards for approximately thirty different categories of discharges from commercial vessels greater than 79 feet in length, and for ballast water from commercial vessels of all sizes. Following finalization of the regulations, EPA will coordinate with the United States Coast Guard on their implementing regulations. In FY 2022, EPA plans to issue revised sewage no-discharge zone guidance for public comment and continue to work with states on designating no-discharge zones within their waters.

Ocean Dumping Management Program. The MPRSA regulates the disposition of any material in the ocean unless expressly excluded under MPRSA. In the United States, the MPRSA implements the requirements of the London Convention. In FY 2023, EPA will evaluate MPRSA permitting requests for the ocean dumping of all materials except dredged materials and, as appropriate, issue MPRSA emergency, research, general, and special permits. This may include addressing MPRSA permitting requests for sub-seabed sequestration of CO₂ in geological formations, ocean-based carbon dioxide removal activities, or ocean-based solar radiation management activities. The U.S. Army Corps of Engineers uses EPA's ocean dumping criteria when evaluating requests for MPRSA permits and MPRSA federal project authorizations for the ocean dumping of dredged material (e.g., to support the expansion of ports and harbors or maintenance of navigation channels). All dredged material MPRSA permits and federal project authorizations are subject to EPA review and written concurrence. In FY 2023, EPA will manage approximately 100 EPAdesignated ocean disposal sites, conduct ocean monitoring surveys at approximately six to ten sites, evaluate requests to designate (through rulemaking) new ocean disposal sites and/or modify (i.e., expand the capacity of) existing EPA-designated sites. EPA will maintain national program capacity by training EPA staff and developing technical/regulatory tools to improve MPRSA permitting, site designation, and site management. EPA will provide training for new Chief Scientist candidates and existing Chief Scientists responsible for designing and implementing ocean monitoring surveys. In FY 2023, EPA will serve as the Head of the United States Delegation for the annual London Convention (LC) and London Protocol (LP) Scientific Groups Meetings, Alternate Head of the United States Delegation for the annual Consultative Meeting of the LC and LP Parties, and Chair of the annual LC/LP Consultative Meeting. With the U.S. Army Corps of Engineers, EPA will submit the annual United States Ocean Dumping Report to the International Maritime Organization.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$228.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,603.0 / +6.2 FTE) This program change is an increase of resources and FTE to build program capacity, particularly in areas related to environmental justice, water infrastructure support and oversight, climate change resilience, and regulatory reviews. This investment includes \$1.144 million in payroll.

Statutory Authority:

Clean Water Act; Marine Protection, Research, and Sanctuaries Act (Ocean Dumping Act); Marine Debris Research, Prevention and Reduction Act of 2006; Marine Plastic Pollution Research and Control Act of 1987; Save Our Seas Act 2.0.

Surface Water Protection

Program Area: Ensure Clean Water Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$197,137	\$206,882	\$239,688	\$32,806
Total Budget Authority	\$197,137	\$206,882	\$239,688	\$32,806
Total Workyears	937.8	944.2	1,020.8	76.6

Program Project Description:

The Surface Water Protection Program, under the Clean Water Act (CWA), directly supports efforts to protect, improve, and restore the quality of our Nation's coasts, rivers, lakes, and streams. EPA works with states and tribes to make continued progress toward clean water goals.

EPA uses a suite of regulatory and non-regulatory programs to protect and improve water quality and ecosystem health in the nation's watersheds. In partnership with other federal agencies, tribes, states, territories, local governments, and non-governmental partners, EPA will work collaboratively with public and private sector stakeholders nationally and locally to establish innovative, location-appropriate programs to achieve the Agency's goals.

This program also supports implementation of water quality standards, effluent guidelines, impaired waters listing, water quality monitoring and assessment, water quality certification, National Pollutant Discharge Elimination System (NPDES) permitting, and management and oversight of the Clean Water State Revolving Fund (CWSRF).

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the FY 2022 - 2026 EPA Strategic Plan. Work in this program also directly supports progress toward the Agency Priority Goal: Clean up contaminated sites and invest in water infrastructure to enhance the livability and economic vitality of overburdened and underserved communities. By September 30, 2023, EPA will provide technical assistance to at least 10 communities to help achieve clean and safe water and reduced exposures to hazardous substances. ⁵⁰⁹ Current work is focused on developing a map-based screening tool to assist regions in identifying these communities.

In FY 2023, EPA will work with states and tribes to target funds to core requirements while providing states and tribes with flexibility to best address their priorities for surface water protection. The FY 2023 request will allow EPA to focus on advancement of clean water

⁵⁰⁹ This Agency Priority Goal is implemented jointly with Goal 6.

infrastructure programs, with an emphasis on building climate change resilience, conducting CWA regulatory reviews, and advancing environmental justice through technical assistance and stakeholder engagement.

Program Implementation

Water Quality Criteria and Standards. Water quality criteria and standards provide the scientific and regulatory foundation for water quality protection programs under the CWA. EPA will provide new and revised national recommended ambient water quality criteria as required by CWA Section 304. EPA also will be adopting and implementing water quality standards in accordance with 40 CFR part 131. In FY 2023, the Agency will place special emphasis on engaging with underserved communities in the review and setting of state water quality standards. Many underserved communities face contamination of their local waters. This work will help empower these communities to secure adequate water quality standards for their local waters and to drive attainment of those standards through technical assistance and stakeholder engagement. The Agency will place special emphasis on improving the water quality standards in tribal waters on reserved lands and in waterways where tribes retain treaty rights to better ensure that tribes' health and natural resources are protected.

Effluent Limitations Guidelines (ELGs). As required under the CWA, EPA will continue to annually review industrial sources of pollution and publish a preliminary ELG plan for public review, followed by a final biennial ELG plan informed by public comment. These plans will identify any industrial categories where ELGs need to be revised or where new ELGs need to be developed. In FY 2023, EPA intends to increase the capability of EPA's Effluent Guidelines program to reduce industrial pollutant discharges through innovative technology nationwide. These discharges often directly and disproportionately affect underserved downstream communities by contaminating their water sources and fish caught for consumption. The Agency will invest in engaging communities that are so often bearing the brunt of the industrial discharges that are the focus of ELGs, through surface water and fish contamination, drinking water contamination, stress on drinking water treatment systems, and impairment of aquatic ecosystems.

In addition, EPA is initiating a new ELG rulemaking to strengthen wastewater guidelines for power plants that use steam to generate electricity. EPA has decided to implement the 2020 Steam Electric Reconsideration Rule and simultaneously conduct a rulemaking to potentially strengthen the Steam Electric ELGs (40 CFR Part 423) under the Clean Water Act. As part of the rulemaking EPA is committed to meaningful engagement of impacted communities and other stakeholders on potential revisions to the Steam Electric ELGs. Work in FY 2023 will allow EPA to develop the new proposed rule which could lead to additional water pollutant reductions by requiring more stringent pollution control technologies for the waste stream. EPA expects to complete the proposed rule in FY 2023.

Biosolids. EPA will continue to implement the biosolids (sewage sludge) program as required under CWA Section 405, including reviewing the biosolids regulations at least every two years to identify additional toxic pollutants and promulgate regulations for such pollutants consistent with the CWA. EPA also will continue to develop tools to conduct risk assessments for chemicals and pathogens found in biosolids. EPA will focus resources on obtaining and using the latest scientific

knowledge to identify resource recovery and reuse alternatives, understanding and managing the biosolids lifecycle, engaging partners—particularly those communities most affected—and conducting research. Investment in the biosolids program is critical to addressing near term risks from PFAS, dioxins and dibenzofurans, PCBs, and other chemicals known to be in domestic sewage sludge that is currently applied to land.

Impaired Waters Listings and Total Maximum Daily Loads (TMDLs). EPA will work with states and other partners to identify impaired waters, as required by CWA Section 303(d), and on developing TMDLs followed by waterbody restoration plans for listed impaired waterbodies. Climate change is increasing the need for this work as it drives more severe weather events, which in turn may carry higher volumes of pollution into waterways. TMDLs focus on clearly defined environmental goals and establish a pollutant budget, which is then implemented through local, state, and federal watershed plans and programs to restore waters. EPA also will work with states and tribes on their CWA Section 303(d) programs, TMDLs, and other restoration and protection plans to ensure they are effective and can be implemented. EPA will provide support to promote implementation ready TMDLs and the protection of unimpaired or high-quality waters. This program is at an important inflection point as we build on the significant progress implementing the state-EPA collaborative 10-year program vision, "A Long-Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program," announced in December 2013. EPA is now working with states and other partners to develop the vision for the Program for the next 10 years. The announcement of a new long-term program framework is expected by September 2022. As part of developing the new framework, EPA will be evaluating how the Program can best address equity, environmental justice, climate, and tribal considerations.

Monitoring and National Aquatic Resource Surveys (NARS). EPA will continue working with states and tribes to support the National Aquatic Resource Survey's statistically representative monitoring of the condition of the Nation's waters which supports CWA Section 305(b). EPA will explore opportunities to leverage NARS data analysis to gain insight on disparities in water quality and the impacts of climate change. EPA will leverage NARS training programs to support workforce development in water quality monitoring and build tribal capacity for monitoring and assessment. EPA also will continue working with states and tribes to support base water quality monitoring programs and priority enhancements that serve state and tribal CWA programs in a cost-efficient and effective manner. EPA will continue supporting state and tribal water quality data exchange and tools to maximize the use of data from multiple organizations to support water quality management decisions.

Waters of the United States. EPA and the Department of the Army published the final Navigable Waters Protection Rule (NWPR) in April 2020. In accordance with Executive Order 13990: Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis, 510 EPA and the Department of the Army completed their review of the NWPR and proposed a new rule on December 7, 2021. The proposal recommends putting back into place the pre-2015 definition of "waters of the United States," updated to reflect consideration of Supreme Court decisions. This familiar "waters of the United States" approach had been in place for decades and

⁵¹⁰ For more information, please see: https://www.federalregister.gov/documents/2021/01/25/2021-01765/protecting-publichealth-and-the-environment-and-restoring-science-to-tackle-the-climate-crisis

would solidify the rules of the road while the agencies continue to consult with stakeholders to build upon that regulatory foundation in an anticipated second rulemaking action.

Water Quality Certification. In response to Executive Order 13868: Promoting Energy Infrastructure and Economic Growth, ⁵¹¹ issued in April 2019, EPA finalized a rule to update the CWA Section 401 certification regulations in June 2020. In accordance with Executive Order 13990, EPA completed a review of the rule and has initiated a new rulemaking to revise the 2020 rule. EPA's intent is to propose a new rule in FY 2022 to update the Agency's longstanding 1971 regulatory requirements for water quality certification under CWA Section 401. The Agency will provide robust engagement with states, tribes, and stakeholders during the rulemaking process. Section 401 of the CWA gives states and authorized tribes the authority to assess potential water quality impacts of discharges from federally permitted or licensed infrastructure projects that may affect "waters of the United States."

Water Quality Programs. The NPDES Program protects human health, safety, and the environment by regulating point sources that discharge pollutants into waters of the United States. In an average year, over 10,000 permits are issued to address discharges from among the approximately 15,000 wastewater treatment facilities, nearly 60 categories of industries, and almost 300,000 stormwater facilities. EPA authorizes the NPDES permit program to state, tribal, and territorial governments, and currently 47 states, tribes in Maine, and U.S. Virgin Islands have authorized programs.

In FY 2023, EPA will continue to implement the water quality programs that control point source discharges through permitting and pretreatment programs. The permitting process is a vital tool for protecting waterways, particularly in underserved communities that may suffer from a combination of economic, health, and environmental burdens, by setting effluent limits, monitoring, and reporting requirements, and other provisions to protect water quality and public health. In addition, as climate change increases the stress on waterways, these permits allow EPA and the states to set appropriate requirements for the waste streams that cause harmful algal blooms (HABs) and increase the temperature of rivers and streams.

In addition, as required under the CWA and Executive Order 12866: *Regulatory Planning and Review*, ⁵¹² EPA will continue to support cost-benefit analysis for CWA regulatory actions. EPA will work with states, tribes, territories, and local communities to safeguard human health; maintain, restore, and improve water quality; and make America's water systems sustainable and secure, supporting new technology and innovation wherever possible.

Nutrient and HAB Reductions. The FY 2023 request includes resources and FTE to support efforts to reduce nutrient pollution and HABs, which remain the most significant widespread water quality challenge across the country, despite decades of efforts to achieve reductions.⁵¹³ Climate change is exacerbating HABs. The sources and impacts of nutrient pollution and HABs vary depending on geographic location, and span urban, rural, and coastal landscapes. EPA has been working with

⁵¹¹ For more information, please see: https://www.federalregister.gov/documents/2019/04/15/2019-07656/promoting-energy-infrastructure-and-economic-growth

infrastructure-and-economic-growth

512 For more information, please see: https://www.epa.gov/laws-regulations/summary-executive-order-12866-regulatory-planning-and-review.

⁵¹³ For more information, please see https://www.epa.gov/nutrientpollution.

its partners to address these challenges. As of January 2022, more than 19,900 square miles of watersheds with waters identified as impaired by nutrients in October 2019 are now attaining standards. In FY 2021, EPA released revised ambient water quality criteria under the CWA to address nutrient pollution in lakes and reservoirs. The FY 2023 request will allow EPA to assist states, territories, and authorized tribes in the development of numeric nutrient criteria through the Nutrient Scientific Technical Exchange Partnership & Support (N-STEPS) Program and support science research related to HABs.

Per- and Polyfluoroalkyl Substances (PFAS). The FY 2023 request directs resources toward addressing PFAS in surface waters through the development of national recommended ambient water quality criteria for PFOA and PFOS; biosolids risk assessments for PFOA and PFOS; methods for detecting PFAS in wastewater; collection of information on discharges of PFAS from nine industrial point source categories to determine if revisions to one or more ELGs is warranted; incorporating PFAS monitoring requirements in NPDES permits and fish tissue monitoring. In FY 2023, EPA will build on the Agency's PFAS Action Plan with the four-year PFAS Strategic Roadmap and comprehensive set of actions that the EPA Council on PFAS is collaboratively developing to guide the Agency's efforts on PFAS.

Water Reuse. To assure that communities have safe, reliable sources of water that are resilient to drought, flooding, and population growth, EPA is working to advance the consideration of water reuse nationwide. This work is being done in collaboration with a broad group of stakeholders including non-governmental organizations, states, tribes, and local governments. In FY 2023, EPA will continue to support the National Water Reuse Action Plan and develop and pursue actions that prioritize advancing technical and scientific knowledge on water reuse to ensure its safety across a range of uses and applications. EPA also will pursue actions in the Plan that provide financial tools to stakeholders to ensure the accessibility of water reuse.⁵¹⁴

Water Sense. The WaterSense Program is a key component of the Agency's efforts to ensure long-term sustainable water infrastructure, reduce GHG emissions, and help communities adapt to drought and climate change. WaterSense provides consumers with a simple label to identify and select water-efficient products to help them save water and money and provides resources and tools to help water utilities carry out efforts to manage water demand and wastewater flows. As of 2022, the Agency has voluntary specifications for three water-efficient service categories and nine product categories. The Program also has a specification to label water-efficient single and multifamily homes that are designed to save water indoors as well as outdoors. Product specifications include water efficiency as well as performance criteria to ensure that products not only save water but also work as well as standard products in the marketplace. Products and homes may only bear the WaterSense label after being independently certified to ensure that they meet WaterSense specifications. As of March 2022, the Program has labeled more than 38,000 models of plumbing and irrigation products and more than to 4,200 homes have earned the WaterSense label. In FY 2023, the Program will work with its partners to carry out consumer campaigns that

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⁵¹⁴ For more information, please see https://www.epa.gov/waterreuse.

⁵¹⁵ WaterSense Accomplishment Reports (updated annually). For more information visit:

encourage consumers to switch to WaterSense-labeled products and practice other water-efficient behaviors in their homes, outdoors, and in the workplace. EPA also will continue support to additional sectors by working with the ENERGY STAR Program to achieve multiple benefits of water and energy savings.

Urban Waters Federal Partnership Program. The Urban Waters Federal Partnership Program (UWFP) reconnects urban communities with their waterways, particularly communities that are overburdened or economically distressed. The Program supports urban champions, UWFP Ambassadors who work with diverse local stakeholder groups to collaborate on community-led revitalization efforts to improve our Nation's water systems and promote their economic, environmental, and social well-being. At the national level, EPA leads a coalition of 20 federal agencies that support 20 UWFP partnership locations in cities in all ten regions. In FY 2022, all UWFP partners recommitted their support for the Program and endorsed bold new goals for program operations, growth, and actions to address Administration priorities, particularly environmental justice, which is a core goal of the Program. Through this partnership, EPA will continue to revitalize urban waters and the communities that surround them by leading the UWFP Steering Committee, managing national program operations, funding Ambassadors, funding priority improvement projects defined by communities, and maintaining the Urban Waters Learning Network, which provides resources and assistance to hundreds of community leaders nationwide. Starting in FY 2022, the UWFP is expanding its environmental justice role, addressing water equity issues in the context of utility services, disproportionate flood impacts, equitable access to clean water, and youth job creation.

One Water/One Community: EPA will coordinate CWA and Safe Drinking Water Act investments toward historically underserved and overburdened communities that are facing greater climate and water equity challenges to achieve greater resilience, access to clean and safe water, and an improved quality of life. This program will provide holistic support to communities as they respond to the climate crisis by increasing funding for planning and implementation actions across the country. Additionally, EPA will work with tribes to meet the unique needs of their communities.

Infrastructure

EPA will continue its support of the Nation's infrastructure, focusing on efforts to leverage and encourage public and private collaborative efforts and investments in improving the Nation's water infrastructure. This program supports the policy and fiduciary oversight of the CWSRF Program, which provides low-interest loans and additional subsidization to help finance wastewater treatment facilities and other water quality projects. The Program supports policies and outreach that help ensure the good financial condition of the State Revolving Funds. Federal capitalization to the SRFs is significantly leveraged; since 1988, the CWSRF Program has made 42,842 assistance agreements, funding over \$145 billion in wastewater infrastructure and other water quality projects.

The FY 2023 request:

https://www.epa.gov/watersense/accomplishments-and-history.

⁵¹⁶ For more information, please see https://www.epa.gov/cwsrf.

- Supports funding for the Environmental Finance Centers Program which will help communities across the country improve their wastewater and stormwater systems, particularly through innovative financing.
- Drives progress on water infrastructure by increasing non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA). Between FY 2020 and FY 2021, EPA has leveraged over \$22.3 billion in non-federal dollars.
- Supports decentralized (septic or onsite) systems that provide communities and homeowners with a safe, affordable wastewater treatment option by implementing the 2020 Decentralized Wastewater Management MOU. Decentralized wastewater systems are used throughout the country for both existing and new homes as well as commercial or large residential settings; they are in small, suburban, and rural areas where connecting to centralized treatment is often too expensive or may not be available.
- Supports the Wastewater Technology Center that provides accurate and objective resources on innovative and alternative wastewater technologies with a focus on small, mid-sized, and underserved communities. The Center serves to support effective investments in 21st century utilities and will support utilities holistically as they embark on adopting technologies; serve as a forum between the sector and government to identify synergies; share information and springboard new initiatives; support the adoption of innovative and alternative technologies; and increase and facilitate our understanding of the opportunities and impacts of emerging technologies to the National Water Program.
- Supports the Wastewater Technology Clearinghouse, a searchable database that will provide reliable, objective information on proven innovative and alternative technologies for decentralized and centralized alternative wastewater treatment, such as water reuse, small system technologies used by lagoons, resource recovery, and nutrients.
- Supports the Sustainable Utility Management programs, implemented in partnership with industry associations and designed to protect and improve infrastructure investments through the Effective Utility Management Program, the Water Workforce Initiative, and tools such as augmented alternatives analysis that help communities leverage investments to achieve water protection goals and other community economic and societal goals.
- Supports the Water Infrastructure and Resiliency Finance Center in assisting local leaders in identifying financial approaches for their drinking water, wastewater, and stormwater infrastructure needs.
- Supports the Agency's efforts in implementing the Infrastructure Investment and Jobs Act of 2021 (IIJA). EPA will focus on helping disadvantaged communities, ensuring they are able to access the funding provided by IIJA.
- Works on the Clean Water Needs Survey (CWNS).

Program Oversight/Accountability

The Assessment TMDL Tracking Implementation System (ATTAINS). ATTAINS is an online system for accessing information about the conditions in the Nation's surface waters. It provides key information to the Agency, as well as states and tribes, who play a critical role in implementing the CWA. For programs where states and tribes have primacy, the Agency will focus on providing oversight and assistance. The Agency will continue to support tribes and states in electronically reporting CWA Section 303(d) and Section 305(b) assessment conclusions through ATTAINS to track improvements in impaired waters. This tool reduces burden on states to track and report

progress in meeting water quality standards in waters targeted for local action and greatly improves evidence-based tracking of local actions to improve water quality.

EPA will continue to track state progress in completing TMDLs, alternative restoration approaches, or protection plans with the goal of 84 percent of plans in place at state identified priority waters by the end of FY 2022. As of January 2022, over 75 percent of state priority waters were addressed by a TMDL, alternative restoration plan, or protection approach. Following the conclusion of this CWA Section 303(d) Vision metric in FY 2022, states will set a new 2-year priority universe and EPA will continue to track new state progress in completing TMDLs, alternative restoration approaches, or protection plans with the goal of 35 percent of plans in place for state identified priority waters by the end of FY 2023. This 2-year "bridge metric" will serve as a transition period before states set priorities under EPA's new CWA section 303(d) Vision 2.0, which is still in development and expected to be released by September 2022.

EPA continues to support streamlining efforts to allow states to reduce the time they spend on administrative reporting. We will work on improved reporting of the Agency's metric to reduce the number of square miles of watershed with surface water not meeting standards. Between August 2019 and January 2022, over 55,200 square miles of watershed that contained impaired waters in FY 2019 attained compliance with water quality standards.

NPDES Oversight. The Program continues to work with states to provide oversight and technical assistance to the permit program, support program implementation and pursue comprehensive protection of water quality on a watershed basis. This review also evaluates pretreatment programs across the country. The pretreatment program is a cooperative effort of federal, state, and local governments that perform permitting and enforcement tasks for discharges to publicly owned treatment works.

EPA continues to collaborate with the permitting authorities (states) to identify opportunities to enhance the integrity and timely issuance of NPDES permits. EPA is making efforts to modernize permitting and oversight practices by eliminating its permitting backlog and implementing programmatic measures. Factors that contribute to delays in the permit issuance process include increased complexity of permitting emerging contaminants and permit litigation. After program improvements, between March 2018 and September 2021, the backlog of EPA-issued new and existing NPDES permits decreased from 106 to 22 and 284 to 322, respectively. In FY 2023, EPA will continue to host NPDES-related workshops and provide technical assistance to build permit writer capacity on a range of topics including permit writing, pretreatment, whole effluent toxicity, stormwater, nutrients, and issue general permits where appropriate to address permit integrity and timeliness to continue to reduce the backlog of permits.

In FY 2023, EPA will continue to work with the federal permitting authorities to address PFAS in NPDES permitting. The recently released *Interim Strategy for PFAS in Federally Issued NPDES Permits*, recommends that permit writers include permit requirements for phased-in monitoring and best management practices, as well as a continuing education on permitting practices. In FY 2023, EPA will continue to build upon this strategy by conducting training, collaborating with state permitting authorities, and sharing the latest research and state practices, to prevent this contaminant from reaching surface waters.

EPA will work on addressing court decisions related to Maui, Hawaii in the permitting program. In *County of Maui v. Hawaii Wildlife Fund*, the Supreme Court held that discharges from point sources through groundwater that eventually reach a water of the United States require an NPDES permit if they are the "functional equivalent" of a direct discharge to a water of the United States. In FY 2023, EPA will continue to provide technical assistance to permit writers to implement this decision effectively in permits.

Integrated Planning. Clean water infrastructure investment needs are documented to be several hundred billion dollars, with wet weather improvements (CSOs, SSOs, bypasses, and stormwater discharges) comprising a significant portion of this total. Investment needs of this magnitude affect utility rates, and disproportionately impact underserved communities. Integrated planning, utilizing green infrastructure, and other tools allow communities to synchronize infrastructure investments with broader community development goals. An integrated approach creates opportunities for affordable, multi-benefit investments that protect public health and enhance resiliency. As an effort to promote the adoption of green or nature-based infrastructure as effective solutions to advance climate resilience or support the resilience of traditional hard infrastructure, EPA has reinvigorated the Green Infrastructure Federal Collaborative. ⁵¹⁷ This cooperative effort fosters engagement and cooperation between agencies that actively work to promote the implementation of green infrastructure. In FY 2023, EPA will continue to implement integrated planning and green infrastructure practices to address wet weather challenges and increase infrastructure resiliency.

Building Coalitions to Advance the Permitting Program. EPA continues to work with our stakeholders and industry to identify challenges in implementation and best management practices. In FY 2023, EPA will continue to lead the Animal Agriculture Discussion Group (AADG), which consists of animal agriculture representatives from U.S. Department of Agriculture, the animal feeding industry, and the states. AADG provides a forum for industry to engage with permitting authorities, resulting in a shared understanding of how to enhance agricultural practices that lead to greater water quality protection.

Improving NARS Data. Another process improvement effort is focused on streamlining the flow of NARS data from EPA labs to state partners and data analysts. The Agency will continue to implement these process improvements and monitor impact of data delivery on timeliness of analysis and reporting.

Improving timeliness of water quality standards actions. EPA is investing in reducing the backlog of water quality standards (WQS) actions. The Agency will continue to work to decrease the number of state and tribal WQS revision actions that have been submitted to EPA that EPA neither approved nor disapproved within the first 60 days after submittal, and that have yet to be acted upon. The CWA requires EPA to review state and tribal WQS revisions and either approve within 60 days or disapprove within 90 days.

401(a)(2) Notifications. In FY 2022, EPA will develop a system to track 401(a)(2) notifications. EPA will track whether a "may effect" determination has been made and to who (state or tribe)

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⁵¹⁷ For more information please visit: https://www.epa.gov/green-infrastructure/green-infrastructure-federal-collaborative.

and then note the follow-up coordination, including potential public hearings, EPA recommendations, and whether the EPA recommendation led to improvements in the federal permit or license. The notifications will mostly come from the Army Corps of Engineers but can come from any federal permitting or licensing agency.

Performance Measure Targets:

(PM SWP-01) Annual increase in square miles of watersheds with surface water meeting standards that previously did not meet standards.	FY 2022 Target 8,000	FY 2023 Target 5,000
(PM SWP-02) Annual increase in square miles of watersheds with previously impaired surface waters due to nutrients that now meet standards for nutrients.	FY 2022 Target 2,100	FY 2023 Target 1,400
(PM TMDL-02) Percentage of priority TMDLs, alternative restoration plans, and protection approaches in place.	FY 2022 Target	FY 2023 Target
(PM NPDES-03) Number of existing EPA-issued NPDES individual permits in backlog.	FY 2022 Target	FY 2023 Target
(PM INFRA-06) Number of tribal, small, rural, or underserved communities provided with technical, managerial, or financial assistance to improve system operations.	FY 2022 Target	FY 2023 Target 448

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$7,417.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$9,761.0 / +45.8 FTE) This program change is an increase in resources and FTE to support the advancement of clean water infrastructure programs, with an emphasis on building climate change resilience, conducting Clean Water Act regulatory reviews, and advancing environmental justice. This investment also includes \$8.102 million in payroll.
- (+\$7,219.0 / +17.8 FTE) This program change is an increase in resources and FTE to support coordinated community assistance work in support of the One Water/One Community initiative and the Environmental Finance Centers. This investment also includes \$3.149 million in payroll.
- (+\$6,092.0 / +9.0 FTE) This program change is an increase in resources and FTE to support the implementation of the Agency's *PFAS Action Plan* including development of national recommended ambient water quality criteria for PFOA and PFOS; biosolids risk assessments for PFOA and PFOS; methods for detecting PFAS in wastewater; and collection of information on discharges of PFAS from nine industrial point source categories. This investment also includes \$1.592 million in payroll.

• (+\$2,317.0 / +4.0 FTE) This program change is an increase in resources and FTE to expand the Program's existing water workforce initiative to develop a coordinated federal response and action plan to support the water workforce. This will enable EPA to collaborate with our partners to identify the top workforce priorities and implement actions to address those priorities. This investment also includes \$708.0 thousand in payroll.

Statutory Authority:

CWA; Marine Protection, Research, and Sanctuaries Act; Marine Debris Research, Prevention and Reduction Act of 2006; Marine Plastic Pollution Research and Control Act of 1987.

Congressional Priorities

Water Quality Research and Support Grants

Program Area: Clean and Safe Water Technical Assistance Grants Goal: Ensure Clean and Safe Water for All Communities Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$0	\$21,700	\$0	-\$21,700
Science & Technology	\$0	\$7,500	\$0	-\$7,500
Total Budget Authority	\$0	\$29,200	\$0	-\$29,200

Project Description:

The purpose of the Water Quality Research and Support Grants Program is to provide training and technical assistance for small public water systems, to help such systems achieve and maintain compliance with the Safe Drinking Water Act (SDWA), and to provide training and technical assistance for small publicly-owned wastewater systems, communities served by onsite/decentralized wastewater systems, and private well owners improving water quality under the Clean Water Act (CWA).

FY 2023 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2023. States have the ability to develop technical assistance plans for their water systems using Public Water System Supervision Program grant funds and set-asides from the Drinking Water State Revolving Fund.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (-\$21,700.0) This program change proposes to eliminate the Water Quality Competitive Grant Program. Resources are available through other existing programs and states are best positioned to develop technical assistance plans for their water systems.

Statutory Authority:

SDWA § 1442(e); Federal Food, Drug and Cosmetic Act; Food Quality Protection Act; Endangered Species Act; CWA § 104(b)(3).

Environmental Protection Agency FY 2023 Annual Performance Plan and Congressional Justification

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Environmental Protection Agency FY 2023 Annual Performance Plan and Congressional Justification

APPROPRIATION: Inspector General Resource Summary Table

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Inspector General				
Budget Authority	\$38,174	\$43,500	\$55,865	\$12,365
Total Workyears	211.1	227.5	258.5	31.0

^{*}For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

Bill Language: Office of the Inspector General

For necessary expenses of the Office of Inspector General in carrying out the provisions of the Inspector General Act of 1978, 55,865,000, to remain available until September 30,2024.

Note — A full-year 2022 appropriation for this account was not enacted at the time the Budget was prepared; therefore, the Budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of Public Law 117-43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.

Program Projects in IG

(Dollars in Thousands)

Program Project	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	\$38,174	\$43,500	\$55,865	\$12,365
TOTAL IG	\$38,174	\$43,500	\$55,865	\$12,365

^{*}For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

Audits, Evaluations, and Investigations

Audits, Evaluations, and Investigations

Program Area: Audits, Evaluations, and Investigations Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Inspector General	\$38,174	\$43,500	\$55,865	\$12,365
Hazardous Substance Superfund	\$11,634	\$11,586	\$12,062	\$476
Total Budget Authority	\$49,807	\$55,086	\$67,927	\$12,841
Total Workyears	266.6	270.0	301.0	31.0

Program Project Description:

EPA's Office of Inspector General (OIG) is an independent office of the U.S. Environmental Protection Agency, created by the Inspector General Act of 1978, as amended. In support of that independence, Congress provides the OIG with a separate appropriation, within the Agency's budget. The vision of the OIG is to be a premier oversight organization trusted to speak the truth, promote good governance, and contribute to improved human health and the environment. This vision is pursued through the mission of the OIG.

The OIG conducts independent audits, special reviews, evaluations, and investigations. The OIG also makes evidence-based recommendations to promote economy, efficiency, and effectiveness. The OIG seeks to identify risks and vulnerabilities within the Agency to prevent and detect fraud, waste, abuse, mismanagement, and misconduct for the U.S. Environmental Protection Agency as well as the U.S. Chemical Safety and Hazard Investigation Board (CSB).

The OIG promotes public trust and safety by keeping the head of the Agency, Congress, and the CSB Chair fully and immediately informed of deficiencies, vulnerabilities, and other agency activities that indicate the presence of fraud, waste and/or abuse, the necessity for and progress toward OIG recommended corrective actions and being responsive with a sense of urgency to hotline and whistleblower complaints submitted for immediate action. The OIG's activities assist in the prevention and detection of fraud in EPA's programs and operations, including but not limited to financial, scientific, cyber, and other. The OIG consistently provides a significant positive return on investment to the public in the form of recommendations for improvements in the delivery of EPA's mission, reduction in operational and environmental risks, costs savings and recoveries, and improvements in program efficiencies and integrity. 518

OIG's auditing arm resides within the Office of Audit (OA). The OA is comprised of five directorates: Financial; Business Operations; Information Resources Management; Pollution Control and Cleanup; and Environmental Investment and Infrastructure. Together, they are responsible for independent oversight of EPA and CSB programs and for recommending needed

⁵¹⁸ For more information, please see: https://www.epa.gov/office-inspector-general/epa-oig-organization-profile.

improvements to programs and operations. Specifically, the Office of Audit conducts performance audits to assess the economy, efficiency, and effectiveness, internal control, and compliance of EPA programs and EPA business operations. In addition, the Office of Audit conducts 15 statutorily mandated audits, including financial audits of EPA and CSB financial statements as required by the Federal Managers' Financial Integrity Act and audits of the information security practices of EPA and CSB as required by the Federal Information Security Modernization Act.

OIG's evaluations arm resides with the Office of Special Review and Evaluation (OSRE). OSRE is comprised of three directorates. OSRE's two evaluation directorates are responsible for independent oversight of EPA programs and recommending needed improvements to programs and operations. The two evaluation directorates within OSRE are: (1) Programs, Offices, and Centers Oversight Directorate and (2) the Implementation, Execution, and Enforcement Directorate. OSRE's third directorate is the newly formed Administrative Investigations Directorate, which conducts administrative investigations into allegations of misconduct by senior agency employees and complaints of whistleblower reprisal by agency employees, or employees of agency contractors, subcontractors, grantees, subgrantees or personal services contractors. The directorate also performs special reviews of significant events and emergent issues of concern that involve a suspected or alleged violation of law, regulation, or policy, or allegations of serious mismanagement.

OA and OSRE conduct their mission in compliance with the Inspector General Act, as amended, the Generally Accepted Government Accounting Standards, and the Council of Inspectors General on Integrity and Efficiency's *Quality Standards for Federal Offices of Inspector General*, as applicable based upon the work performed. Work efforts focus on efficiency and program operations: program performance, including a focus on the award and administration of grants and contracts; statutorily mandated audits; financial reviews of grantees and contractors; and information resources management. In addition, performance audits, program reviews and evaluations, as well as inspections are conducted specifically to ensure targeted coverage of EPA programs and offices providing the greatest impact and receiving the greatest resources.

The investigative mission of the OIG is to conduct criminal, civil, and administrative investigations into fraud and serious misconduct within EPA that undermine the organization's integrity and public trust or creates an imminent risk or danger. OIG investigations are coordinated with the Department of Justice and other federal, state, and local law enforcement entities. These investigations may lead to prosecution and civil judgments wherein there is a recovery and repayment of financial losses. The major areas of investigative focus include fraudulent practices, program integrity, laboratory fraud, serious employee misconduct, and cyber-crimes.

The audit, special review and evaluations, and investigative core mission program offices are directly supported by the OIG's management and administrative functions of its Office of the Chief of Staff, Office of Management, Office of Counsel and Congressional and Public Affairs.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 – 2026 EPA Strategic Plan.

The OIG is focused on assessing EPA and CSB programs and operations in order to improve upon human health and the environment through the conduct of audits, special reviews and evaluations, and investigations. The goal is to improve EPA and CSB business practices and accountability to meet stakeholders' needs. The OIG assists the Agency in its efforts to develop and enforce regulations that implement environmental laws by making recommendations to improve program operations; save taxpayer dollars; reduce the potential for fraud, waste, and abuse; and resolve identified top management challenges and internal control weaknesses. These efforts are designed to promote cleaner air, land, and water, and ensure chemical safety for America. In FY 2023, the OIG will target initiatives supporting EPA's Top Management Challenges; EPA's stated priorities as they align with the Administration's priorities and targeted funding (i.e., climate change, environmental justice, infrastructure, etc.); Congressional interests; and environmental issues made significant due to intense public interest. In order to carry out its foci, the OIG will seek to increase its agility to assess emerging environmental threats; increase its use of data analytics and business intelligence to increase its capability to strategically target resources to address high risk, high vulnerability areas of interest; employ best practices in support of improving efficiency, effectiveness, accountability, and monetary benefits; focus on measurable impact; and increase its return on investment to the American public through substantive recommendations followed through to implementation.

Based on prior work, cross-agency risk assessment, agency challenges, future priorities, and extensive stakeholder input, the OIG will focus its resources on efforts in the following areas of concentration during FY 2023:

Audits, Special Reviews, and Evaluations

Sound and Economical Management

- Annual mandated improper payments audits in EPA and CSB
- Annual mandated financial statements audits in EPA and CSB
- Audits of costs claimed by selected grantees and contractors
- Grant, cooperative agreement, and contract administration, such as grantee management of funds
- Cost efficiencies maximization and process improvement, such as improved acquisition planning
- Technological changes that create transformation opportunities
- Annual mandated travel card program, including risk assessment in accordance with the Government Charge Card Abuse Prevention Act of 2012
- Annual mandated purchase card and convenience check program, including risk assessment
- Annual mandated toxic substances fees in accordance with the Pesticide Registration Improvement Act and Federal Insecticide, Fungicide, and Rodenticide Act
- Efficiency and effectiveness of collection and payment processes
- Single audit sub-recipients monitoring
- Internal controls

Efficient Processes and Use of Resources

• Partnerships and coordination with other agencies to maximize efficiencies

- Opportunities to reduce duplication, overlap, and fragmentation within EPA
- Grant, Interagency Agreement Grant, and Interagency Agreement Management
- Efficiency and effectiveness of human capital management programs/workforce analysis and management
- High-risk contractors
- Continuity of Operations (COOP) readiness of delegated programs to continue their operations/business as usual during COVID or another COOP event

Ensuring the Integrity of EPA Information

- Agency preparedness for providing remote access services
- Agency efforts to enhance its capability to respond to cyber-attacks
- Cybersecurity/infrastructure development; and assessment of processes to ensure protection and security of information systems from fraud, waste, and abuse
- Follow-up on prior OIG cybersecurity audit recommendations
- Compliance with policies for federal agency public websites and digital services Plan of Action & Milestones
- Annual mandated audit of compliance with the Federal Information Security Modernization Act for EPA and CSB
- Oversight of Chief Information Officer's responsibilities under the Federal Information Technology Acquisition Reform Act
- Mandated readiness reviews of Agency Digital Accountability and Transparency Act of 2014
- IT support to the mandated financial statement audits

Assessing Risk Management and Performance Measurement

- Implementation of Federal Managers Financial Integrity Act, Federal Information Security Management Act, and Government Performance and Results Act
- Disaster response and homeland security and emergency preparedness and response
- Construction grants and revolving loan funds awarded to states and territories
- Review of contractor federal performance
- Assistance agreements related to cleanup and Brownfields
- Review of performance measures for eliminated EPA programs later funded by congressional appropriation

Assessing Program Integrity, Results, Oversight, Enforcement

- Oversight of Infrastructure Investment and Jobs Act (P.L. 117-58) funding
- Follow-up on prior OIG work for continuity of operations such as the impact of the coronavirus pandemic on state hazardous waste programs
- Evaluation of EPA's programs, activities, requirements, and initiatives to address environmental justice
- Evaluations of EPA's programs and activities to protect human health and the environment through progress toward goals and compliance with requirements, such as chemical risk assessments conducted under the Toxic Substances Control Act (TSCA), Clean Air Act oversight, the pollution prevention program, and radiation policies and guidance
- Evaluation of EPA's programs and adherence to requirements to protect and restore water

- that sustains human health and the environment, such as per- and polyfluoroalkyl substances (PFAS) in drinking water, tribal drinking water protection, and state implementation of Clean Water Act
- Evaluation of controls and processes in EPA's research and development, scientific integrity, and enforcement programs, such as cancer assessment reviews and the effectiveness of enforcement self-audits and disclosures
- Oversight of clean water state revolving loan funds
- Assess EPA's policy, procedures, and internal controls to prevent or reduce improper computer use

<u>Investigations</u>

The Inspector General Act identifies the Assistant Inspector General for Investigations as responsible for developing and implementing an investigative program that furthers OIG objectives. The OIG's Office of Investigations (OI) conducts independent investigations to detect and prevent fraud, waste, and abuse, while protecting the integrity of EPA and CSB programs, operations, and resources. Investigations focus on allegations of criminal activity and serious misconduct in EPA and CSB programs and operations. The OIG performs its proactive work strategically as opportunities and resources allow. Investigations are opened in accordance with priorities set forth in the OIG Strategic Plan for FY 2019 – 2023 and in consideration of prosecutorial guidelines established by U.S. Attorneys. OIG investigations are governed by the *Attorney General Guidelines for Offices of Inspector General with Statutory Law Enforcement Authority* and by the Council of the Inspectors General on Integrity and Efficiency's *Quality Standards for Investigations*, as well as other federal statutes and regulations.

The investigative mission of the OIG continues to evolve in conducting criminal and civil investigations into fraud and serious misconduct within EPA programs and operations that undermine the organization's integrity and public trust or create an imminent risk or danger. Special Agents within the OI are duly appointed federal criminal investigators and have statutory authority to carry firearms, make arrests, execute search and seizure warrants, and perform other law enforcement duties. The OI often collaborates with other law enforcement entities and external stakeholders to enhance the effectiveness of its work. The OIG investigations are coordinated with the Department of Justice and other federal, state, and local law enforcement entities for criminal and civil litigation or with EPA management for administrative action. Investigative efforts may lead to criminal convictions, administrative sanctions, civil monetary penalties, and judgments wherein there is a recovery and repayment of financial losses. Additionally, during and at the conclusion of investigations, the OI works with the Suspension and Debarment Office within EPA, "whose actions protect the government from doing business with entities that pose a business risk to the government."

The OIG plays a critical oversight role helping to ensure that EPA and CSB funds are properly expended and not subject to fraud, waste, or abuse. The recent COVID-19 pandemic and the resulting frauds has emphasized the nature of the OIG in protecting the integrity of the EPA's programs. Major areas of investigative focus in this oversight include: 1) financial fraud related to agency grants and contracts concerning State Revolving Funds, interagency and cooperative agreements, and fraud related to mischarging, defective pricing, defective products and collusion

on contracts; 2) laboratory fraud, including that related to water quality data as well as payments made by EPA for erroneous environmental testing; 3) employee integrity and alleged criminal conduct or serious administrative misconduct focusing on activities that could undermine the integrity of agency programs involving safety and public health, and erode confidence in the Agency pursuing its mission; 4) program integrity focusing on serious misconduct or criminal activity that could undermine or erode the public trust and confidence in EPA, its programs, or its employees; and 5) cybercrime to identify and counter information technology security threats, illegal intrusions, and abuse of EPA computer systems, critical environmental infrastructure in the air and water sectors, as well as investigations and responses in support of EPA's Office of Homeland Security, to include possible cyber terrorist attacks on EPA's computer infrastructure. Over the last year, the OIG has seen an increase in ransomware attacks, network intrusions, and an attempt to hack into and poison municipal drinking water. To combat the rapidly expanding cyberthreat landscape, the OIG will increase its participation and presence with law enforcement cyber investigations, task forces, critical infrastructure security partners, and agency directorates. Furthermore, OIG will respond to growing threats against water utilities implicating public safety and the environment.

Finally, the OI often makes observations or "lessons learned" for EPA's management to reduce the Agency's vulnerability to criminal activity. The results of OI's investigations are published in the OIG's semiannual reports and can serve as a deterrent to future misconduct. In addition, the OI's investigations provide measurable results wherein recovery and restitution of financial losses are achieved, and administrative actions are taken to prevent those involved from further participation in any of EPA's programs or operations which may lead to better accountability and deterrence.

The OI has reorganized its Field Operations Directorate by realigning the four field offices into two regional offices - the Eastern Region Field Office and the Western Region Field Office. The Eastern Region Field Office is responsible for matters within EPA Regions 1 through 5 while the Western Region Field Office is responsible for matters within EPA Regions 6 through 10. This realignment has improved the efficiency, effectiveness, and consistency of the OI's operations by allowing the Field Operations Directorate to better oversee its field operations and investigations. In addition, the OI Headquarters hired two attorney-advisors to support our investigative operations.

Follow-up and Policy/Regulatory Analysis

To further promote economy, efficiency, and effectiveness, the OIG will conduct follow-up reviews of agency responsiveness to the OIG's recommendations to determine if appropriate actions have been taken and intended improvements have been achieved. This process will serve as a means for keeping Congress and EPA leadership apprised of accomplishments and opportunities for needed corrective actions and facilitate greater accountability for results from the OIG operations.

Additionally, as directed by the IG Act, as amended, the OIG's audits and evaluations often cover assessment of proposed and existing policies, rules, regulations, and legislation to identify vulnerability to waste, fraud, and abuse. These assessments also consider possible duplication,

gaps, or conflicts with existing authority, leading to recommendations for improvements in their structure, content, and application.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$1,678.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$213.0) This change to fixed and other costs is an increase due to an adjustment for transit subsidy costs.
- (+\$10,474.0 / +31.0 FTE) This program change is an increase to ensure adequate resources in expanding the oversight arm of audit, evaluations, investigation, and support offices within the OIG, to include the newly formed Administrative Investigations directorate within the Office of Special Review and Evaluations, which conducts administrative investigations into allegations of misconduct by senior agency employees and complaints of whistleblowers. The OIG's expanded reach also includes increasing the use of data analytics and business intelligence in an effort to address high risk, high vulnerability areas of interest. This program change also includes \$5.59 million in payroll.

Statutory Authority:

Inspector General Act of 1978.

Inspector General Reform Act:

The following information is provided pursuant to Section 6(g)(2) of the Inspector General Reform Act:

- The aggregate budget request from the Inspector General for the operations of the OIG is \$67.9 million (\$55.8 million Inspector General: \$12.1 million Superfund Transfer)
- The aggregate President's Budget for the operations of the OIG is \$67.9 million (\$55.8 million Inspector General: \$12.1 million Superfund Transfer)
- The portion of the aggregate President's Budget needed for training is \$1.1 million (\$864 thousand Inspector General: \$190 thousand Superfund Transfer)
- The portion of the aggregate President's Budget needed to support the Council of the Inspectors General on Integrity and Efficiency is \$243 thousand (\$194.4 thousand Inspector General: \$48.6 thousand Superfund Transfer)

"I certify as the Inspector General of the Environmental Protection Agency that the amount I have requested for training satisfies all OIG training needs for FY 2023".

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APPROPRIATION: Building and Facilities Resource Summary Table

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Building and Facilities				
Budget Authority	\$43,076	\$33,752	\$80,570	\$46,818
Total Workyears	0.0	0.0	0.0	0.0

Bill Language: Buildings and Facilities

For construction, repair, improvement, extension, alteration, and purchase of fixed equipment or facilities of, or for use by, the Environmental Protection Agency, \$80,570,000, to remain available until expended.

Note.—A full- year 2022 appropriation for this account was not enacted at the time the Budget was prepared; therefore, the Budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of Public Law 117-43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.

Program Projects in B&F

(Dollars in Thousands)

	FY 2021	FY 2022 Annualized	FY 2023 President's	FY 2023 President's Budget v. FY 2022 Annualized
Program Project	Final Actuals	CR	Budget	CR
Homeland Security				
Homeland Security: Protection of EPA Personnel and Infrastructure	\$7,006	\$6,676	\$6,676	\$0
Operations and Administration				
Facilities Infrastructure and Operations	\$36,071	\$27,076	\$73,894	\$46,818
TOTAL B&F	\$43,076	\$33,752	\$80,570	\$46,818

Homeland Security

Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security Goal: Safeguard and Revitalize Communities Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$4,915	\$4,959	\$5,139	\$180
Science & Technology	\$500	\$501	\$501	\$0
Building and Facilities	\$7,006	\$6,676	\$6,676	\$0
Hazardous Substance Superfund	\$845	\$1,030	\$1,530	\$500
Total Budget Authority	\$13,266	\$13,166	\$13,846	\$680
Total Workyears	9.2	9.2	9.2	0.0

Total workyears in FY 2023 include 9.2 FTE to support Homeland Security Working Capital Fund (WCF) services.

Program Project Description:

EPA's Buildings and Facilities resources in the Homeland Security: Protection of EPA Personnel and Infrastructure Program support the protection of federal employees, contractors, grantees, and private citizens (occupants) who work within or visit EPA facilities nationwide. EPA's buildings are a combination of headquarters and regional administrative offices, program and research laboratories, and support facilities/warehouses. These facilities are either EPA owned/leased or General Services Administration (GSA) owned/leased. This funding ensures federal mandates are met as they relate to physical security and local emergency preparedness for all Agency locations. These funds support the physical security protection equipment and mechanisms required to protect occupants, for facility relocation (e.g., moves, new leases, consolidations, etc.), physical equipment upgrades/modernization, or corrective actions required to address security vulnerabilities identified during security assessments.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA will continue to partner with GSA on the Enterprise Physical Access Control System (ePACS). ePACS supports the Agency's modernization of its security infrastructure in compliance with Homeland Security Presidential Directive-12 (HSPD-12)⁵¹⁹ and ensures that the Agency is undertaking every effort to enhance safety, security, and efficiency by more effectively controlling access into all EPA-controlled physical space and networks.

⁵¹⁹ For additional information, please see: https://www.dhs.gov/homeland-security-presidential-directive-12.

In FY 2023, EPA will complete security projects to ensure the protection of occupants and compliance with federal mandates for physical security, including:

- Migration to ePACS at the Research Triangle Park, NC Laboratory, the Ann Arbor, MI Laboratory, the Newport, OR Environmental Laboratory, and the EPA Headquarters facilities in Washington, DC.
- Upgrading closed-circuit television and physical security in response to vulnerabilities identified from previously conducted physical security assessments.

The Agency will continue to utilize GSA's Managed Service Office program, *USAccess*, for Personal Identity Verification card enrollment and issuance. *USAccess* is a GSA managed, shared services solution that provides EPA the ability to produce and maintain secure and reliable forms of identification, as required per HSPD-12, for all EPA employees and contractors.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• There is no change in program funding.

Statutory Authority:

Intelligence Reform and Terrorism Prevention Act of 2004; Homeland Security Act of 2002; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Operations and Administration

Facilities Infrastructure and Operations

Program Area: Operations and Administration Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$257,524	\$285,441	\$288,293	\$2,852
Science & Technology	\$65,093	\$67,500	\$68,912	\$1,412
Building and Facilities	\$36,071	\$27,076	\$73,894	\$46,818
Leaking Underground Storage Tanks	\$932	\$836	\$724	-\$112
Inland Oil Spill Programs	\$628	\$682	\$641	-\$41
Hazardous Substance Superfund	\$81,976	\$68,727	\$71,219	\$2,492
Total Budget Authority	\$442,223	\$450,262	\$503,683	\$53,421
Total Workyears	334.2	315.4	325.4	10.0

Total workyears in FY 2023 include 5.4 FTE to support Facilities Infrastructure and Operations working capital fund (WCF) services.

Program Project Description:

EPA's Buildings and Facilities (B&F) appropriation supports the design, construction, repair, and improvement of EPA's federally owned and leased land and structures in accordance with applicable codes and standards. Since 2013, construction, renovation, and alteration projects costing more than \$150 thousand must use B&F funding. B&F resources ensure that the Agency complies with various mandates and goals including: the Energy Policy Act of 2005; the Energy Act of 2020; the Energy Independence and Security Act of 2007 (EISA); and regulatory mandates associated with soil and water pesticides testing.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In accordance with the Memorandum on Implementation of Agency-wide Real Property Capital Planning (M-20-03)⁵²⁰ and the *Federal Assets Sale and Transfer Act of 2016*,⁵²¹ the Agency will continue to review its space needs. EPA is implementing a long-term space consolidation plan that aims to reduce the number of occupied facilities, consolidate, and optimize space within remaining facilities, and reduce square footage wherever practical. B&F resources are essential to the implementation of the long-term space consolidation plan. B&F resources also support facility-related construction and the repair and improvement (R&I) of EPA's aging real estate inventory, including the laboratory facilities necessary to support EPA's mission. Good stewardship practices

⁵²⁰ For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2019/11/M-20-03.pdf.

⁵²¹ For additional information, please refer to: Federal Assets Sale and Transfer Act of 2016, https://www.congress.gov/114/plaws/publ287/PLAW-114publ287.pdf.

demand that the physical conditions, functionality, safety and health, security, and research capabilities of the Agency's facilities are adequately maintained to ensure successful completion of EPA's mission requirements and goals.

In FY 2023, EPA proposes an administrative provision to raise the B&F per project threshold from \$150 thousand to \$350 thousand. The B&F threshold was last increased from \$85 thousand to \$150 thousand in FY 2013. Since 2013, costs for construction, material, and labor have increased significantly. Additional information is found in the Proposed FY 2023 Administrative Provisions section.

This program supports EPA's efforts to increase facility resiliency and sustainability to combat the effects of climate change while adapting EPA space to a growing workforce. In FY 2023, EPA will continue to conduct climate resiliency assessments at all EPA-owned facilities and prioritize additional opportunities to reduce climate-related fiscal risks. Assessments will identify potential projects the Agency can undertake to increase facility resiliency against the impacts of climate change, such as roofing stability or seawall construction projects. EPA will initiate all high-priority projects within 24 months of a climate assessment.

Through master planning and nationwide efforts to use space more efficiently, EPA identifies B&F projects, which support the long-term conditions and efficiency of EPA facilities. Further, B&F resources are necessary for EPA to comply with GSA leasing practices requiring agencies to fund construction initiatives, including sustainable features ⁵²² as tenant improvements (TI) or up front and ongoing project costs. These requirements significantly increase TI cost for new leases, pulling critical funding from ongoing efforts to consolidate space and reduce the Agency's footprint in accordance with the *Federal Asset Sale and Transfer Act of 2016*.

Space consolidation and reconfiguration enable EPA to reduce its footprint to create a more efficient, collaborative, and technologically sophisticated workplace. However, even if modifications are kept to a minimum, each move requires B&F funding. In FY 2023, the Agency requests \$12 million to reconfigure EPA's workplaces to ensure the space footprint can accommodate a growing and increasingly hybrid workforce while keeping long-term rent costs from increasing. When reconfiguring facilities, EPA will work to increase facility resiliency and sustainability to combat the effects of climate change.

The FY 2023 request includes \$27 million for ongoing projects that provide critical maintenance for aging laboratory facilities and are key to ensuring that the Agency has access to preeminent laboratory science. EPA must invest in structural infrastructure (e.g., architectural and design) and mechanical systems (e.g., electrical, water/steam, HVAC). These projects also will maintain a safe workplace, provide for high quality science, support agency priorities, and advance the Agency's mission. EPA will focus on critical facility repairs and infrastructure upgrades to maintain an acceptable Facility Condition Index (FCI), which measures the current state of EPA owned facilities and informs B&F investment decisions. Delaying essential repairs results in the deterioration of EPA's facilities, which increases long-term repair costs and presents safety risks.

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⁵²² Many of these features are required by EISA or executive orders.

⁵²³ For additional information on the Synthesis Report of the U.S. EPA Laboratory Enterprise Evaluation, please refer to: https://www.epa.gov/sites/production/files/2015-03/documents/synthesisreportoftheusepalaboratoryenterprise.pdf.

In FY 2023, EPA requests \$34.8 million to prioritize climate sustainability and resiliency investments in new construction and the rehabilitation of United States Government installations, buildings, and facilities to ensure they are climate ready. Examples of shovel-ready investments include:

- National Vehicle and Fuel Emission Laboratory (NVFEL), Ann Arbor, Michigan. NVFEL is an example of a building sustainability project, EPA will invest in the repair, replacement and operations and maintenance (O&M) of NVFEL's extensive infrastructure to meet energy environmental requirements leading to energy savings and sustainability to meet the challenges of climate change.
- Gulf Breeze, Narragansett, Edison, and Newport Laboratories. EPA will invest in climate resiliency-infrastructure protection for these regional and programmatic laboratories, including sea level and storm rise protection and power resiliency.

In FY 2023, the Agency will continue the following space optimization projects with the potential for the greatest long-term cost and energy savings:

- Co-Locating in the Ada, Oklahoma laboratory. EPA will continue its work to consolidate employees currently in leased laboratory space into owned space. The Agency is co-locating operations for the regional laboratory in Houston, Texas with the EPA-owned laboratory in Ada, Oklahoma. In FY 2023, EPA will begin Phase 2 and 3 of construction.
- Optimizing space at the Athens, Georgia laboratory. In FY 2023, EPA will continue construction in the Main Lab Building (Office of Research and Development Athens).
- Co-Locating in the Corvallis, Oregon laboratory. The Agency is co-locating operations for the Region 9 laboratory in Richmond, California with the EPA-owned laboratory in Corvallis, Oregon. In FY 2023, the Agency will finalize construction of the Region 9 Facilities Support Services Center, which is designed for Region 9 laboratory support. In FY 2023, there will be minor renovations to the Plant Ecology Building to accommodate Region 9 laboratory storage space in Corvallis, Oregon.

Performance Measure Targets:

(PM CRP) Percentage of priority climate resiliency projects for EPA-owned facilities initiated within 24 months of a completed facility climate	FY 2022 Target	FY 2023 Target
assessment and project prioritization.		100

(PM CAA) Number of EPA-owned facility climate adaptation assessments	FY 2022 Target	FY 2023 Target
completed.	2	5

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$12,000.0) This program change is an increase to modernize and transform EPA workplaces to support a hybrid workforce and to ensure an optimal footprint to support the proposed FTE increase in the FY 2023 Budget request.
- (+\$34,818.0) This program change supports implementation of multiple executive order requirements that will require EPA to increase facility resiliency against the impact of climate change and to advance sustainability of EPA operations.

Statutory Authority:

Federal Property and Administration Services Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

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APPROPRIATION: Hazardous Substance Superfund Resource Summary Table

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Hazardous Substance Superfund				
Budget Authority	\$1,326,363	\$1,205,811	\$1,154,168	-\$51,643
Total Workyears	2,681.8	2,636.5	2,714.2	77.7

^{*}For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

Bill Language: Hazardous Substance Superfund

For necessary expenses to carry out the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), including sections 111(c)(3), (c)(5), (c)(6), and (e)(4) (42) U.S.C. 9611), and hire, maintenance, and operation of aircraft, \$1,154,168,000, to remain available until expended, consisting of such sums as are available in and not already appropriated from the Trust Fund on September 30, 2022, as authorized by section 517(a) of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and up to \$1,154,168,000 as a payment from general revenues to the Hazardous Substance Superfund for purposes as authorized by section 517(b) of SARA: Provided, That funds appropriated under this heading may be allocated to other Federal agencies in accordance with section 111(a) of CERCLA: Provided further, That of the funds appropriated under this heading, \$12,062,000 shall be paid to the "Office of Inspector General" appropriation to remain available until September 30, 2024, and \$31,368,000 shall be paid to the "Science and Technology" appropriation, to remain available until September 30, 2024: Provided further, That of the amounts provided under this heading for Superfund— Enforcement, up to eleven percent shall be transferred to "Department of Justice—Legal Activities—Salaries and Expenses—General Legal Activities" and shall remain available until expended for expenses of CERCLA-related activities conducted by the Environment and Natural Resources Division on behalf of the Environmental Protection Agency.

Note.—A full-year 2022 appropriation for this account was not enacted at the time the Budget was prepared; therefore, the Budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of Public Law 117-43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.

Program Projects in Superfund

(Dollars in Thousands)

Program Project Indoor Air and Radiation	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Radiation: Protection	\$1,973	\$1,985	\$2,872	\$887

Program Project	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	\$11,634	\$11,586	\$12,062	\$476
Compliance				
Compliance Monitoring	\$1,778	\$1,000	\$1,015	\$15
Enforcement				
Criminal Enforcement	\$8,469	\$7,647	\$8,088	\$441
Forensics Support	\$1,250	\$1,145	\$1,263	\$118
Superfund: Enforcement	\$164,461	\$156,773	\$166,487	\$9,714
Superfund: Federal Facilities Enforcement	\$6,974	\$7,424	\$9,863	\$2,439
Subtotal, Enforcement	\$181,153	\$172,989	\$185,701	\$12,712
Environmental Justice				
Environmental Justice	\$681	\$826	\$5,876	\$5,050
Homeland Security				
Homeland Security: Preparedness, Response, and Recovery	\$31,897	\$33,020	\$43,796	\$10,776
Homeland Security: Protection of EPA Personnel and Infrastructure	\$845	\$1,030	\$1,530	\$500
Subtotal, Homeland Security	\$32,742	\$34,050	\$45,326	\$11,276
Information Exchange / Outreach				
Exchange Network	\$1,511	\$1,328	\$1,328	\$0
IT / Data Management / Security				
Information Security	\$752	\$659	\$7,859	\$7,200
IT / Data Management	\$20,984	\$13,826	\$16,904	\$3,078
Subtotal, IT / Data Management / Security	\$21,735	\$14,485	\$24,763	\$10,278
Legal / Science / Regulatory / Economic Review				
Alternative Dispute Resolution	\$632	\$832	\$868	\$36
Legal Advice: Environmental Program	\$1,161	\$443	\$461	\$18
Subtotal, Legal / Science / Regulatory / Economic Review	\$1,793	\$1,275	\$1,329	\$54

Program Project	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Operations and Administration				
Central Planning, Budgeting, and Finance	\$26,775	\$26,561	\$28,806	\$2,245
Facilities Infrastructure and Operations	\$81,976	\$68,727	\$71,219	\$2,492
Acquisition Management	\$23,380	\$23,800	\$32,345	\$8,545
Human Resources Management	\$7,200	\$6,202	\$8,476	\$2,274
Financial Assistance Grants / IAG Management	\$4,224	\$3,210	\$4,403	\$1,193
Subtotal, Operations and Administration	\$143,554	\$128,500	\$145,249	\$16,749
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	\$13,458	\$16,463	\$16,927	\$464
Research: Chemical Safety for Sustainability				
Health and Environmental Risk Assessment	\$3,654	\$12,824	\$4,896	-\$7,928
Research: Chemical Safety for Sustainability	\$6,065	\$0	\$8,060	\$8,060
Subtotal, Research: Chemical Safety for Sustainability	\$9,719	\$12,824	\$12,956	\$132
Superfund Cleanup				
Superfund: Emergency Response and Removal	\$233,104	\$190,000	\$199,835	\$9,835
Superfund: EPA Emergency Preparedness	\$7,555	\$7,700	\$8,056	\$356
Superfund: Federal Facilities	\$24,264	\$21,800	\$36,272	\$14,472
Superfund: Remedial	\$639,714	\$589,000	\$454,601	-\$134,399
Subtotal, Superfund Cleanup	\$904,636	\$808,500	\$698,764	-\$109,736
TOTAL Superfund *For each of comparison Superfund transfor	\$1,326,363	\$1,205,811	\$1,154,168	-\$51,643

^{*}For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

Audits, Evaluations, and Investigations

Audits, Evaluations, and Investigations

Program Area: Audits, Evaluations, and Investigations Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Inspector General	\$38,174	\$43,500	\$55,865	\$12,365
Hazardous Substance Superfund	\$11,634	\$11,586	\$12,062	\$476
Total Budget Authority	\$49,807	\$55,086	\$67,927	\$12,841
Total Workyears	266.6	270.0	301.0	31.0

Program Project Description:

EPA's Office of Inspector General (OIG) is an independent office of the U.S. Environmental Protection Agency, created by the Inspector General Act of 1978, as amended. In support of that independence, Congress provides the OIG with a separate appropriation, within the Agency's budget to support OIG's Superfund activities. The vision of the OIG is to be a premier oversight organization trusted to speak the truth, promote good governance, and contribute to improved human health and the environment. This vision is met through the mission of the OIG.

The OIG conducts independent audits, special reviews, evaluations, and investigations. The OIG also makes evidence-based recommendations to promote economy, efficiency, and effectiveness. The OIG seeks to identify risks and vulnerabilities within the Agency to prevent and detect fraud, waste, abuse, mismanagement, and misconduct for the U.S. Environmental Protection Agency as well as the U.S. Chemical Safety and Hazard Investigation Board (CSB).

The OIG promotes public trust and safety by keeping the head of the Agency and Congress fully and immediately informed of deficiencies, vulnerabilities, and other agency activities that indicate the presence of fraud, waste and/or abuse, and the necessity for and progress toward OIG recommended corrective actions and being responsive with a sense of urgency to hotline and whistleblower complaints submitted for our immediate action. The OIG's activities assist in the prevention and detection of fraud in EPA's Superfund programs and operations. The OIG consistently provides a significant positive return on investment to the public in the form of recommendations for improvements in the delivery of EPA's mission, reduction in operational and environmental risks, costs savings and recoveries, and improvements in program efficiencies and integrity. 524

OIG's auditing arm resides within the Office of Audit (OA). The OA is comprised of five directorates: Financial; Business Operations; Information Resources Management; Pollution Control and Cleanup; and Environmental Investment and Infrastructure. Together, they are responsible for independent oversight of EPA and CSB programs and for recommending needed

⁵²⁴ For more information, please see: https://www.epa.gov/office-inspector-general/epa-oig-organization-profile.

improvements to programs and operations. Specifically, the Office of Audit conducts performance audits to assess the economy, efficiency, and effectiveness, internal control, and compliance of EPA Superfund programs and EPA Superfund business operations.

OIG's evaluations arm resides with the Office of Special Review and Evaluation (OSRE). OSRE is comprised of three directorates. OSRE's two evaluation directorates are responsible for independent oversight of EPA programs and recommending needed improvements to programs and operations. The two evaluation directorates within OSRE are: (1) Programs, Offices, and Centers Oversight Directorate and (2) the Implementation, Execution, and Enforcement Directorate. OSRE's third directorate is the newly formed Administrative Investigations Directorate which conducts administrative investigations into allegations of misconduct by senior agency employees and complaints of whistleblower reprisal by agency employees, or employees of agency contractors, subcontractors, grantees, subgrantees or personal services contractors. The directorate also performs special reviews of significant events and emergent issues of concern that involve a suspected or alleged violation of law, regulation, or policy, or allegations of serious mismanagement.

OA and OSRE conduct their mission in compliance with the Inspector General Act, as amended, the Generally Accepted Government Accounting Standards, and the Council of Inspectors General on Integrity and Efficiency's *Quality Standards for Federal Offices of Inspector General*, as applicable based upon the work performed. Work efforts focus on efficiency and program operations: program performance, including a focus on the award and administration of grants and contracts; statutorily mandated audits; financial reviews of grantees and contractors; and information resources management. In addition, performance audits, program reviews and evaluations, as well as inspections are conducted specifically to ensure targeted coverage of EPA programs and offices providing the greatest impact and receiving the greatest resources.

The investigative mission of the OIG is to conduct criminal, civil, and administrative investigations into fraud and serious misconduct within the EPA that undermine the organization's integrity and public trust or creates an imminent risk or danger. OIG investigations are coordinated with the Department of Justice and other federal, state, and local law enforcement entities. These investigations may lead to prosecution and civil judgments wherein there is a recovery and repayment of financial losses. The major areas of investigative focus include fraudulent practices, program integrity, laboratory fraud, serious employee misconduct, and cyber-crimes.

The audit, special review and evaluations, and investigative core mission program offices are directly supported by the OIG's management and administrative functions of its Office of the Chief of Staff, Office of Management, Office of Counsel and Congressional and Public Affairs.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 – 2026 EPA Strategic Plan.

The activities of the OIG are supported through the core value to be the best in public service through customer service, integrity, and accountability. The summary of this value is to contribute

to improved EPA Superfund and other cleanup programs and operations protecting human health and the environment, and enhancing safety; conduct audits, evaluations, and investigations that enable EPA to improve business practices and accountability to meet stakeholders' needs. The OIG assists the Agency in its efforts to develop and enforce regulations that implement environmental laws by making recommendations to improve program operations; save taxpayer dollars; reduce the potential for fraud, waste, and abuse; respond to cybercrimes; and resolve previously identified major management challenges and internal control weaknesses resulting in cleaner air, land, and water, and ensured chemical safety for America.

In FY 2023, the OIG will: target initiatives supporting EPA's Top Management Challenges and stated priorities. To execute this mission, the OIG will increase its agility to assess emerging environmental threats; increase its use of data analytics, business analytics, and business intelligence to better target resources to address high risk, high vulnerability areas of interest; employ best practices in support of improving efficiency, effectiveness, accountability, and monetary benefits; focus on measurable impact; and increase its return on investment to the American public regarding issues related to the Superfund Program.

Based on prior work, agency challenges, cross-agency risk assessment, future priorities, and extensive stakeholder input, the OIG will focus its resources on efforts in the following areas of concentration during FY 2023:

Audits and Evaluations

The OIG Office of Audit and Office of Special Review and Evaluation conduct projects to oversee EPA's efforts to improve human health and the environment. The Offices will identify program and management risks and determine if EPA is efficiently and effectively reducing human health risks; taking effective enforcement actions; cleaning up hazardous waste; managing waste; restoring previously polluted sites to appropriate uses; and ensuring long-term stewardship of those sites. The OIG assignments will include: assessment of the adequacy of internal controls in EPA (and its grantees and contractors) to protect resources and achieve program results; project management to ensure that EPA (and its grantees and contractors) have clear plans and accountability for performance progress; enforcement to evaluate whether there is consistent, adequate, and appropriate application of the laws and regulations across jurisdictions with coordination between federal, state, and local law enforcement activities; and evaluation of grants and contracts to verify that such awards are made based upon uniform risk assessment, and that grantees and contractors perform with integrity.

Prior audits and evaluations of the Superfund Program have identified numerous barriers to implementing effective resource management and program improvements. Therefore, the OIG will concentrate its resources on efforts in the following assignment areas:

- EPA's Superfund institutional controls achievement of their stated goal for preventing human exposure at Superfund sites
- EPA's progress in ensuring private party Superfund liabilities are adequately covered by sufficient financial assurance mechanisms

- Superfund portion of EPA's legislatively mandated audits, such as financial statement and Federal Information Security Modernization Act, to include sampling, monitoring, communication, and opportunities for cleanup efficiencies
- Survey of remedial project managers on impacts for long-term cleanup due to operational
 effects of COVID-19 such as: shutdown of pump and treat system, inability to monitor
 remedy operations, or inability to transport hazardous waste to accomplish remedial
 objectives
- Assess the effectiveness of actions taken as a result of the 2017 Superfund Task Force Report
- Evaluate ways to minimize fraud, waste, and abuse, with emphasis on identifying opportunities for cost savings and reducing risk of resource loss, while maximizing results achieved from Superfund contracts and assistance agreements

Investigations

The Inspector General Act identifies the Assistant Inspector General for Investigations as responsible for developing and implementing an investigative program that furthers OIG objectives. The OIG's Office of Investigations (OI) conducts independent investigations to detect and prevent fraud, waste, and abuse, while protecting the integrity of EPA's Superfund Program. Investigations focus on allegations of criminal activity and serious misconduct in EPA Superfund programs and operations. The OIG performs its proactive work strategically as opportunities and resources allow. Investigations are opened in accordance with priorities set forth in the OIG Strategic Plan for FY 2019 – 2023 and in consideration of prosecutorial guidelines established by U.S. Attorneys. OIG investigations are governed by the *Attorney General Guidelines for Offices of Inspector General with Statutory Law Enforcement Authority* and by the Council of the Inspectors General on Integrity and Efficiency's *Quality Standards for Investigations*, as well as other federal statutes and regulations.

The investigative mission of the OIG continues to evolve in conducting criminal and civil investigations into fraud and serious misconduct within EPA Superfund programs and operations that undermine the organization's integrity and public trust or create an imminent risk or danger. Special Agents within the OI are duly appointed federal criminal investigators and have statutory authority to carry firearms, make arrests, execute search and seizure warrants, and perform other law enforcement duties. The OI often collaborates with other law enforcement entities and external stakeholders to enhance the effectiveness of its work. The OIG investigations are coordinated with the Department of Justice and other federal, state, and local law enforcement entities for criminal and civil litigation or with EPA management for administrative action. Investigative efforts may lead to criminal convictions, administrative sanctions, civil monetary penalties, and judgments wherein there is a recovery and repayment of financial losses. In addition, during and at the conclusion of investigations, the OI works with the Suspension and Debarment Office within EPA, "whose actions protect the government from doing business with entities that pose a business risk to the government."

The OIG plays a critical oversight role helping to ensure that EPA and U.S. Chemical Safety and Hazard Investigation Board (CSB) funds are properly expended and not subject to fraud, waste, or abuse. Investigative focus in this oversight include: 1) fraudulent practices in awarding, performing, and paying Superfund contracts, grants, or other assistance agreements; 2) program fraud or other acts that undermine the integrity of, or confidence in the Superfund Program and create imminent environmental risks; 3) laboratory fraud relating to data, and false claims, or erroneous laboratory results that undermine the basis for decision-making, regulatory compliance, or enforcement actions in the Superfund Program; 4) criminal conduct or serious administrative misconduct by EPA employees involved in the Superfund Program; and 5) intrusions into and attacks against EPA's network supporting Superfund Program data, contractors and grant recipients handling sensitive EPA data, as well as incidents of computer misuse and theft of intellectual property or sensitive/proprietary Superfund data.

Finally, the OI often makes observations or "lessons learned" for EPA's management to reduce the Agency's vulnerability to criminal activity in the Superfund Program. The results of OI's investigations are published and can serve as a deterrent to future misconduct. In addition, the OI's investigations provide measurable results wherein recovery and restitution of financial losses are achieved, and administrative actions are taken to prevent those involved from further participation in any Superfund Program or operation which may lead to better accountability and deterrence.

The OI has reorganized its Field Operations Directorate by realigning the four field offices into two regional offices - the Eastern Region Field Office and the Western Region Field Office. The Eastern Region Field Office is responsible for matters within EPA Regions 1 through 5 while the Western Region Field Office is responsible for matters within EPA Regions 6 through 10. This realignment has improved the efficiency, effectiveness, and consistency of the OI's operations by allowing the Field Operations Directorate to better oversee its field operations and investigations. In addition, the OI Headquarters hired two attorney-advisors to assist with investigative operations.

Follow-up and Policy/Regulatory Analysis

To further promote economy, efficiency, and effectiveness, the OIG will conduct follow-up reviews of agency responsiveness to the OIG's recommendations for the Superfund Program and other land issues to determine if appropriate actions have been taken and intended improvements have been achieved. This process will serve as a means for keeping Congress and EPA leadership apprised of accomplishments and opportunities for needed corrective actions and facilitate greater accountability for results from the OIG operations.

Additionally, as directed by the IG Act, as amended, the OIG's audits and evaluations often cover assessment of proposed and existing policies, rules, regulations, and legislation pertaining to the clean-up programs, to include Superfund, to identify vulnerability to waste, fraud, and abuse. These assessments also consider possible duplication, gaps, or conflicts with existing authority, leading to recommendations for improvements in their structure, content, and application.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$350.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$47.0) This change to fixed and other costs is an increase due to an adjustment for transit subsidy costs.
- (+\$79.0) This program change is an increase to support audits, investigations, increased risk vulnerabilities to fraud, waste, and abuse, and the operations of EPA's Superfund Program.

Statutory Authority:

Inspector General Act of 1978.

Inspector General Reform Act:

The following information is provided pursuant to Section 6(g)(2) of the Inspector General Reform Act:

- The aggregate budget request from the Inspector General for the operations of the OIG is \$67.9 million (\$55.8 million Inspector General: \$12.1 million Superfund Transfer)
- The aggregate President's Budget for the operations of the OIG is \$67.9 million (\$55.8 million Inspector General: \$12.1 million Superfund Transfer)
- The portion of the aggregate President's Budget needed for training is \$1.1 million (\$864 thousand Inspector General: \$190 thousand Superfund Transfer)
- The portion of the aggregate President's Budget needed to support the Council of the Inspectors General on Integrity and Efficiency is \$243 thousand (\$194.4 thousand Inspector General: \$48.6 thousand Superfund Transfer)

"I certify as the Inspector General of the Environmental Protection Agency that the amount I have requested for training satisfies all OIG training needs for FY 2023".

Compliance

Compliance Monitoring

Program Area: Compliance

Goal: Enforce Environmental Laws and Ensure Compliance Objective(s): Detect Violations and Promote Compliance

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$97,583	\$102,500	\$144,770	\$42,270
Inland Oil Spill Programs	\$132	\$139	\$2,146	\$2,007
Hazardous Substance Superfund	\$1,778	\$1,000	\$1,015	\$15
Total Budget Authority	\$99,493	\$103,639	\$147,931	\$44,292
Total Workyears	439.1	453.9	463.4	9.5

Program Project Description:

The Superfund Compliance Monitoring program supports enforcement of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or "Superfund" law. EPA's national enforcement and compliance data system, the Integrated Compliance Information System (ICIS), provides information and tracks Superfund-related enforcement activities. Electronic tracking of Superfund enforcement work allows EPA to ensure that its enforcement resources are allocated to address the most significant concerns and facilitates transparency.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Detect Violations and Promote Compliance in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA will focus on timely enforcement in communities with potential environmental justice concerns. EPA also will continue to support tracking of CERCLA compliance and enforcement activities.

Performance Measure Targets:

(PM 409) Number of federal on-site compliance monitoring inspections and	FY 2022 Target	FY 2023 Target
evaluations and off-site compliance monitoring activities.	10,000	10,000

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$15.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.).

Enforcement

Criminal Enforcement

Program Area: Enforcement

Goal: Enforce Environmental Laws and Ensure Compliance Objective(s): Hold Environmental Violators and Responsible Parties Accountable

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$49,588	\$51,275	\$61,411	\$10,136
Hazardous Substance Superfund	\$8,469	\$7,647	\$8,088	\$441
Total Budget Authority	\$58,057	\$58,922	\$69,499	\$10,577
Total Workyears	238.6	257.7	291.0	33.3

Program Project Description:

The Criminal Enforcement Program investigates and helps prosecute criminal violations of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and associated violations of Title 18 of the United States Code such as fraud, conspiracy, false statements, and obstruction of justice. EPA's criminal enforcement agents (Special Agents) do this through targeted investigation of criminal conduct, committed by individual and corporate defendants, that threatens public health and the environment.

The Criminal Enforcement Program is strengthened by an ongoing collaboration with the Environmental Justice (EJ) Program, other EPA offices, and the U.S. Department of Justice (DOJ) to ensure our Superfund enforcement work is informed and targeted to address overburdened, underserved and vulnerable communities and to expand outreach opportunities through those offices.

Within the Criminal Enforcement Program, forensic scientists, attorneys, technicians, engineers, and other program experts assist Special Agents in their investigations. EPA's criminal enforcement attorneys provide legal and policy support for all the program's responsibilities, including forensics and expert witness preparation, information law, and personnel law to ensure that program activities are carried out in accordance with legal requirements and agency policies. These efforts support environmental crimes prosecutions primarily by the United States Attorneys and DOJ's Environmental Crimes Section. In FY 2021, the conviction rate for criminal defendants charged as a result of EPA criminal enforcement investigations was 96 percent, with a total of twenty-eight years of incarceration for defendants sentenced in criminal enforcement investigations.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Hold Environmental Violators and Responsible Parties Accountable in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2023, the Agency requests an additional \$441.0 thousand and 0.2 FTE. to build core capacity for criminal enforcement work, with an emphasis on overburdened, underserved, and vulnerable communities with EJ concerns and to support the implementation of the American Innovation and Manufacturing (AIM) Act. EPA will continue efforts to devote resources toward, and effectively focus on those areas and communities that are disproportionally affected by pollution and environmental crime.

EPA will continue to address Superfund-related EJ issues within criminal enforcement. The Criminal Investigation Division (CID) works with partners at the DOJ to jointly prosecute wrongdoing and reduce the impact pollution has on these areas through investigation, judicial actions, and settlements. The Criminal Enforcement Initiative focuses prioritization of investigative resources to overburdened and vulnerable communities, while maintaining case initiation standards and reducing the impact of pollution. EPA Program goals and priorities include the following:

- In FY 2023 EPA's Environmental Crime Victim Witness Assistance Program will closely align its implementation of the Criminal Victims' Rights Act and the Victims' Rights and Restitution Act with EPA's environmental justice work. Activities will include data mining and mapping to identify where communities with EJ concerns, crime victims, and public health impacts overlap. This strategy will aid the Program in identifying sources of pollution impacting these communities and will focus criminal enforcement resources on the nation's most overburdened and vulnerable populations and, where appropriate, use of crime victim program resources and emergency funds to assist individuals in overburdened, underserved, and vulnerable communities.
- In FY 2023, the Criminal Enforcement Program, working with OAR and the Department of Homeland Security, will continue implementing its responsibilities as a part of the HFC (hydrofluorocarbons) Enforcement Task Force, whose permanent mission is to ensure U.S. compliance with the AIM Act. The Task Force will continue to identify, intercept, and interdict illegal HFC imports, share data to support allowances, train customs officers and enforcement personnel, and address common HFC import experiences with other countries. EPA will need to continue standing up its new enforcement and compliance framework. EPA would leverage our experience working with Customs and Border Protection (CBP), DOJ, and other federal partners to successfully enforce federal laws related to HFCs. Critically important to success in this media, are dedicated analysts in the criminal enforcement program to research, assess and coordinate with federal partners, private industry, and task force members.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$290.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$151.0/+0.2 FTE) This program increase will ensure EPA has the capacity and technical expertise to investigate, analyze, sample, test, transport, and store HFCs. The increase in FTE will allow analysts to research, assess, and coordinate with federal partners, private industry, and task force members. This investment includes \$43.0 thousand in payroll.

Statutory Authority:

Title 18 of the U.S.C.; 18 U.S.C. § 3063; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); American Innovation and Manufacturing Act.

Forensics Support

Program Area: Enforcement

Goal: Enforce Environmental Laws and Ensure Compliance Objective(s): Detect Violations and Promote Compliance

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Science & Technology	\$11,761	\$14,000	\$15,532	\$1,532
Hazardous Substance Superfund	\$1,250	\$1,145	\$1,263	\$118
Total Budget Authority	\$13,010	\$15,145	\$16,795	\$1,650
Total Workyears	59.9	68.9	70.3	1.4

Program Project Description:

The Forensics Support Program provides expert scientific and technical support for Superfund civil and criminal enforcement cases, as well as technical expertise for the Agency's compliance efforts. EPA's National Enforcement Investigations Center (NEIC) is an environmental forensic center accredited for both laboratory analysis and field sampling operations that generate environmental data for law enforcement purposes. It is fully accredited under International Standards Organization (ISO) 17025, the main standard used by testing and calibration laboratories, as recommended by the National Academy of Sciences. The NEIC maintains a sophisticated chemistry and physical science laboratory, and a corps of highly trained inspectors and scientists with expertise across environmental media. The NEIC works closely with EPA's Criminal Enforcement Program to provide technical support (e.g., sampling, analysis, consultation, and testimony) to criminal investigations. The NEIC also works closely with other EPA programs to provide technical assistance, consultation, and on-site inspection, investigation, and case resolution services in support of the Agency's Superfund Enforcement Program.

The Forensics Support Program will continue to provide expert scientific and technical support for EPA's Superfund enforcement efforts, focus its work on collecting and analyzing materials to characterize contamination, and attribute it to individual sources and/or facilities. The work NEIC performs typically represents the most complex cases nationwide, requiring a level of expertise and equipment not found elsewhere in EPA, as well as support to evaluate and leverage emerging technologies. The Laboratory also will continue to coordinate its support for the Agency's Superfund, Research and Development, and Land and Emergency Management Programs.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Detect Violations and Promote Compliance in the FY 2022 - 2026 EPA Strategic Plan.

⁵²⁵ Strengthening Forensic Science in the United States: A Path Forward, National Academy of Sciences, 2009, available at: http://www.nap.edu/catalog.php?record_id=12589.

In FY 2023, the Agency requests an additional \$118.0 thousand and 0.1 FTE to ensure EPA has the capacity and technical expertise to investigate, analyze, sample, test, and transport hydrofluorocarbons (HFCs). Effective enforcement relies on the best available science.

In FY 2023, NEIC will support the President's directive to deliver environmental justice (EJ) to communities across America and to hold polluters accountable for their actions. To achieve these goals, the Agency will employ NEIC's environmental forensics expertise to investigate violations of environmental statutes and prosecute environmental crimes in communities that are disproportionally affected by pollution and environmental crime, and to target those areas more effectively. Additionally, the budget supports critical climate change initiatives, including forensics support of climate change enforcement efforts both in civil and criminal enforcement. This is vital to EPA's ability to enforce the hydrofluorocarbons (HFCs) phase down regulations which are imperative to reducing climate impacts. NEIC will be making significant investments to assist with HFC-related enforcement capabilities, including inspector training, acquisition of field sampling equipment, and expansion of laboratory analytical capabilities to the meet the urgent demand for highly complex HFC analysis.

In FY 2023, NEIC will continue to streamline its forensics work and identify enhancements to the Agency's sampling and analytical methods, using existing and emerging technology. NEIC supports EJ by targeting critical industry inspections in overburdened, underserved, and vulnerable communities, and utilizes the data we collect to work with the EPA regional office to take enforcement action that could ultimately improve air and water quality in such communities.

The NEIC also will build on its previous progress to maximize the efficiency and effectiveness of its operations, reduce the time for completion of civil inspection reports, improve procurement processes, and continue to identify and implement further efficiencies in laboratory operations. Of paramount importance, NEIC will build on the work completed in FY 2021 and FY 2022 to support criminal and civil program efforts to combat climate change. The results of these efforts will inform EPA's work in FY 2023 and beyond.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$37.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$81.0 / +0.1 FTE) This program increase will ensure EPA has the capacity and technical expertise to investigate, analyze, sample, test, transport, and store HFCs. This investment includes \$18.0 thousand in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); American Innovation Manufacturing Act.

Superfund: Enforcement

Program Area: Enforcement

Goal: Enforce Environmental Laws and Ensure Compliance Objective(s): Hold Environmental Violators and Responsible Parties Accountable

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Hazardous Substance Superfund	\$164,461	\$156,773	\$166,487	\$9,714
Total Budget Authority	\$164,461	\$156,773	\$166,487	\$9,714
Total Workyears	740.4	771.3	771.8	0.5

Program Project Description:

The Superfund Enforcement Program protects communities by ensuring prompt site cleanup by using an "enforcement first" approach that maximizes the participation of liable and viable parties in performing and paying for cleanups and preserving federal dollars for sites where there are no viable contributing parties. In both the Superfund Remedial and Superfund Emergency Response and Removal Programs, the Superfund Enforcement Program obtains potentially responsible parties' (PRPs) commitments to perform or pay for cleanups through civil, judicial and administrative site actions. The Superfund Enforcement Program works closely with the Superfund Remedial and Superfund Emergency Response and Removal Programs and the U.S. Department of Justice (DOJ) to combine legal and technical skills to bring enforcement actions and address emerging issues.

The Superfund Enforcement Program:

- Obtains cleanup commitments from responsible parties and other third parties, thereby providing long-term human health and environmental protections and making contaminated properties available for reuse.
- Negotiates site cleanup agreements and, where necessary, takes enforcement actions to require cleanup and recover costs, thereby preserving federal taxpayer dollar for sites where there are no viable contributing parties.
- Develops cleanup enforcement policies.
- Provides guidance and tools that clarify potential environmental cleanup liability, with specific attention to the cleanup, reuse, and revitalization of contaminated properties.

In FY 2021, the Superfund Enforcement Program secured commitments for cleanup and cost recovery and billed parties for oversight costs, all totaling more than \$2.1 billion. The use of Superfund enforcement tools resulted in cleanup and redevelopment at 153 private party sites in FY 2021.

Payments for cleanups, in addition to the performance of cleanup work, help accomplish cleanup efforts. Payments may be paid into special accounts, which may be created when EPA receives funds as part of a settlement agreement. Funds received in settlements with PRPs are then used to clean up the specific Superfund sites that were the subject of the settlement agreement. Having the ability to use special accounts provides needed cleanup dollars at many sites that otherwise may not have received funding absent EPA's enforcement efforts. In FY 2021, EPA created 135 special accounts and collected \$221.9 million for response work. The Agency disbursed or obligated \$217.0 million from special accounts for response work (excluding reclassifications).

The Superfund Enforcement Program continues to encourage and facilitate PRPs' expeditious and thorough cleanup of sites, to create oversight efficiencies, and to promote the redevelopment and reuse of sites by encouraging PRPs to invest in reuse outcomes. In addition, the Superfund Enforcement Program encourages new private investment in the cleanup and reuse of sites by optimizing tools to encourage third-party investment. EPA also works to ensure that legally enforceable institutional controls and financial assurance requirements are in place at Superfund sites to ensure the long-term protectiveness of Superfund cleanup remedies.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Hold Environmental Violators and Responsible Parties Accountable in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Agency requests an additional \$9.7 million and 0.5 FTE to strengthen EPA's Superfund Enforcement Program, complement work in the Superfund Remedial and Superfund Emergency Response and Removal programs, provide financial support for DOJ to pursue judicial actions to compel PRP cleanup, and support possible actions in response to per- and polyfluoroalkyl substances (PFAS) releases at federal facilities. EPA will continue its work to achieve prompt site cleanup, maximize the work participation by PRPs, and secure private party funding of cleanups. In addition, the Agency will prioritize its efforts on the most significant sites in terms of human health and environmental impact. To support the Agency's focus on environmental justice and climate change, the Superfund Enforcement Program intends to:

- Require Responsible Parties to Take Early Cleanup Actions
- Ensure Prompt Cleanup Actions by Responsible Parties
- Develop Robust Enforcement Instruments That Address Impacts on Communities and Climate Change Vulnerabilities
- Increase Oversight of Enforcement Instruments
- Build Trust and Capacity Through Community Engagement
- Integrate sustainability principles into enforcement tools, policies, and guidance used for the cleanup and reuse of contaminated sites.

The Agency will continue its efforts to establish special accounts to facilitate cleanup. As special account funds may only be used for sites and uses specified in the settlement agreement, both special account resources and annually appropriated resources are critical to the Superfund Program to clean up Superfund sites. In addition, the Agency will work under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) to address per- and polyfluoroalkyl substances (PFAS) contamination by gathering information to support possible actions under multiple statutory authorities in response to PFAS releases.

DOJ's participation in CERCLA cases is statutorily mandated for settlements related to remedial action cleanups, most cost recovery settlements, and is required for all judicial enforcement matters. DOJ's support will be prioritized to negotiate and to enter consent decrees with PRPs to perform remedial actions, to pursue judicial actions to compel PRP cleanup, and to pursue judicial actions to recover monies spent in cleaning up contaminated sites. EPA provides financial support to DOJ for these activities. In FY 2023, EPA proposes an appropriations language change to provide up to 11 percent from the Superfund Enforcement program to DOJ through a transfer. This change is being requested to assist in the support of DOJ's salaries and expenses for legal activities under CERCLA. ⁵²⁶

Cost Recovery Support

In FY 2023, the Agency also will continue to standardize and streamline the financial management processes for the financial management aspects of Superfund cost recovery and the collection of debt to the federal government. EPA's financial, programmatic, and legal offices will continue to maintain the accounting and billing of Superfund oversight costs attributable to responsible parties. These costs represent EPA's cost of overseeing Superfund site cleanup efforts by responsible parties as stipulated in the terms of settlement agreements. In FY 2021, the Agency collected \$249.9 million in cost recoveries, of which \$43.7 million were returned to the Superfund Trust Fund and \$206.2 million were deposited in site-specific, interest-bearing special accounts.

The Agency will continue to pursue an "enforcement first" approach that maximizes PRP participation at Superfund sites by performing enforcement activities such as conducting PRP searches, negotiating site-specific settlements, and preparing cost recovery packages. These activities ensure that responsible parties conduct or pay for cleanups and preserve federal dollars for sites where there are no viable contributing parties. EPA also will work to increase opportunities for community engagement.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

⁵²⁶ These resources shall only be used for DOJ's salaries and expenses directly related to supporting EPA's Superfund/CERCLA Enforcement Program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$5,806.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$93.0 / +0.5 FTE) This program increase will be used to gather information about PFAS contamination and releases, and to support possible actions by the Agency. This investment includes \$87.0 thousand in payroll.
- (+\$3,815.0) This program increase will be used to strengthen the Agency's Superfund Enforcement Program, complement work in the Superfund Remedial and Superfund Emergency Response and Removal programs, provide financial support for DOJ to pursue judicial actions to compel PRP cleanup, and to pursue judicial actions to recover monies spent in cleaning up contaminated sites.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Superfund: Federal Facilities Enforcement

Program Area: Enforcement Goal: Enforce Environmental Laws and Ensure Compliance Objective(s): Hold Environmental Violators and Responsible Parties Accountable

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023	FY 2023 President's Budget v. FY 2022 Annualized CR
Hazardous Substance Superfund	\$6,974	\$7,424	\$9,863	\$2,439
Total Budget Authority	\$6,974	\$7,424	\$9,863	\$2,439
Total Workyears	34.6	40.9	45.2	4.3

Program Project Description:

EPA's Superfund Federal Facilities Enforcement Program ensures that sites where federal entities are performing Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or "Superfund") responses and/or CERCLA sites with federal ownership are monitored and that appropriate enforcement responses are pursued. After years of service and operation, some federal facilities are contaminated with hazardous wastes, pollutants, and contaminants, such as unexploded ordnance, radioactive wastes, and other toxic substances. Enforcement actions can facilitate cleanup and potential redevelopment of these sites.

Pursuant to CERCLA Section 120, EPA must enter into Interagency Agreements, commonly referred to as Federal Facility Agreements (FFAs), with responsible federal entities to ensure protective and timely cleanup of their National Priorities List (NPL) sites. The agreements provide that EPA will oversee the cleanups to ensure that they protect public health and the environment. These FFAs govern cleanups at 174 federal facility Superfund sites, which include many of the nation's largest and most complex cleanup projects.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Hold Environmental Violators and Responsible Parties Accountable in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Agency requests an additional \$2.4 million and 4.3 FTE to complement work in the Superfund Federal Facilities Program and to support possible actions in response to per- and polyfluoroalkyl substances (PFAS) releases at federal facilities. EPA will continue to focus its resources on the highest priority sites, particularly those that may present an imminent and/or substantial endangerment, have human exposure not yet under control, have the potential for beneficial redevelopment, or have an impact on communities with environmental justice concerns. EPA also will negotiate and amend, as appropriate, FFAs for federal facility sites on the NPL. EPA will work with federal agencies to encourage greater community outreach and transparency. EPA will continue to monitor FFAs for compliance, take enforcement actions at priority sites, and expedite cleanup and redevelopment of federal facility sites. EPA will use alternative dispute

resolution processes and other approaches to expeditiously resolve formal and informal disputes. EPA also will continue to seek ways to improve its engagement with other federal agencies, and state, tribal, and local governments and their partners, emphasizing protective, timely cleanups that address communities' needs.

The Agency also will work to address PFAS contamination by gathering information to support possible actions under multiple statutory authorities in response to PFAS releases. Federal facilities (e.g., military bases and Department of energy sites) are starting to take action at their PFAS-contaminated NPL sites. As federal agencies conduct their work at their federal facility NPL sites, CERCLA requires EPA to oversee the work. An increased investment for EPA's Superfund Federal Facilities Program will support EPA's efforts to oversee the increasing number of initiated remedial investigations projected to occur at federal facilities in the coming years to ensure the expeditious action to address PFAS releases.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$306.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,133.0 / +4.3 FTE). This program increase will be used to complement work in the Superfund Federal Facilities Program and to support possible actions in response to PFAS contamination at federal facilities. This investment includes \$759.0 thousand in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 120.

Environmental Justice

Environmental Justice

Program Area: Environmental Justice

Goal: Take Decisive Action to Advance Environmental Justice and Civil Rights Objective(s): Embed Environmental Justice and Civil Rights into EPA's Programs, Policies, and Activities

(Dollars in Thousands)

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	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$10,343	\$11,838	\$294,938	\$283,100
Hazardous Substance Superfund	\$681	\$826	\$5,876	\$5,050
Total Budget Authority	\$11,024	\$12,664	\$300,814	\$288,150
Total Workyears	34.7	39.9	211.9	172.0

Program Project Description:

EPA's Environmental Justice (EJ) Program coordinates the Agency's efforts to address the needs of overburdened, underserved, and vulnerable communities by decreasing environmental burdens, increasing environmental benefits, and working collaboratively with all stakeholders to build healthy, sustainable communities based on residents' needs and desires. The Program provides financial and technical assistance to communities working constructively and collaboratively to address EJ issues. The EJ Program also works with local, state, tribal, and federal governments; community organizations and their stakeholders; business and industry; and academia to establish partnerships seeking to achieve protection from environmental and public health hazards for people of color, low-income, and indigenous communities at or near Superfund sites.

Work in this Program directly supports Administrator Michael Regan's message "Our Commitment to Environmental Justice" issued on April 7, 2021, 527 in addition to supporting implementation of Executive Order (EO) 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, 528 and EO 14008, Tackling the Climate Crisis at Home and Abroad. 529 In accordance with the American Water Infrastructure Act of 2018 (P.L. 115-270), every EPA regional office employs a dedicated EJ coordinator and the Agency maintains a list of these persons on the EPA's website. 530 The Superfund portion of this Program has focused on issues that affect people of color, low income, and indigenous communities at or near Superfund sites. The EJ Program complements the Agency's community outreach and other work done under the Superfund Program at affected sites.

⁵²⁷ For more information, please see: https://www.epa.gov/newsreleases/epa-administrator-regan-announces-new-initiativessupport-environmental-justice-and.

528 For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-

order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.

529 For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-

order-on-tackling-the-climate-crisis-at-home-and-abroad/.

530 For more information on EPA's regional office contacts, please see: https://www.epa.gov/environmentaljustice/forms/contact- us-about-environmental-justice.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.2, Embed Environmental Justice and Civil Rights into EPA's Programs, Policies, and Activities in the *FY 2022 - 2026 EPA Strategic Plan*.

EPA will continue to implement EJ activities in support of the Superfund Program. The EJ Program will continue to promote the active engagement of community-based organizations, other federal agencies, and tribal, state, and local governments to recognize, support, and advance environmental protection and public health for overburdened communities at or near Superfund sites. The EJ Program will guide EPA's efforts to empower communities to identify and develop solutions to address environmental harms, working to utilize nationally consistent data that combines environmental and demographic indicators in mapping and prioritizing communities with EJ concerns at or near Superfund sites. These efforts help build healthy and sustainable communities through technical assistance, enabling overburdened and vulnerable communities to participate in the new green economy while also better facilitating EPA efforts to further focus federal resources and program design to benefit communities with EJ concerns and those most at risk of climate change impacts at or near Superfund sites.

The EJ Program will continue to partner with and support other agency programs in their efforts to fully integrate EJ considerations into all of EPA's policies, programs, and activities while also better developing nationally consistent data that combines environmental and demographic indicators in mapping and prioritizing communities with EJ concerns at or near Superfund sites.

Performance Measure Targets:

Work under this program supports performance results in the Environmental Justice Program under the EPM appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$65.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$4,985.0 / +2.0 FTE) This program change increases resources to support the development and implantation of a cross-agency effort to advance environmental justice and coordinate EJ activities. This investment includes \$393.0 thousand in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Homeland Security

Homeland Security: Preparedness, Response, and Recovery

Program Area: Homeland Security Goal: Safeguard and Revitalize Communities Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Science & Technology	\$21,877	\$24,852	\$25,890	\$1,038
Hazardous Substance Superfund	\$31,897	\$33,020	\$43,796	\$10,776
Total Budget Authority	\$53,774	\$57,872	\$69,686	\$11,814
Total Workyears	127.2	124.1	125.8	1.7

Program Project Description:

EPA leads or supports many aspects of preparing for and responding to a nationally significant incident involving possible chemical, biological, radiological, and nuclear (CBRN) agents. The Homeland Security Preparedness, Response, and Recovery Program implements a broad range of activities for a variety of federal efforts, including:

- National trainings;
- Participation in national interagency exercises with federal and state partners;
- Support for headquarters and regional Emergency Operations Centers;
- Support for the Agency's continuity of operations devolution site in the EPA Colorado office;
- Enhancements for national information technology systems;
- Secured warehouse space for homeland security operations and storage; and
- Laboratory analyses of environmental samples and site decontamination projects.

EPA's homeland security effort develops these responsibilities through research and maintaining a level of expertise, training, and preparedness specifically focused on threats associated with CBRN. This work is consistent with the Department of Homeland Security's (DHS') National Response Framework.

EPA assists with multi-media training and exercise development and implementation for responders, which establishes and sustains coordination with states, local communities, tribes, and other federal agencies (OFAs). The Agency also provides technical assistance to OFAs, including DHS, the Department of Defense (DOD), the Department of Justice (DOJ), and the Department of Health and Human Services (HHS), in the areas of environmental characterization,

decontamination, and waste disposal methods. In addition, the program operates a national environmental laboratory for chemical warfare agents and implements EPA's National Approach to Response.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the FY 2022-2026 EPA Strategic Plan.

In FY 2023, the Homeland Security Preparedness, Response, and Recovery Program will:

- Participate in trainings and exercises on CBRN preparedness and response topics with key federal response partners (e.g., DHS, DOD, and DOJ) on select inter-agency workgroups.
- Target exercises to improve preparedness for communities with environmental justice concerns and increase incorporation of environmental justice into preparedness activities.
- Provide expertise on detection, environmental characterization, decontamination, and waste disposal methods following the release of a CBRN agent.
- Maintain operational support for the Emergency Management Portal and *WebEOC* response systems.
- Conduct research to enhance response capabilities by developing methods, tools, and information for site characterization, decontamination, waste management, and clearance for priority chemical, biological, and radiological threats while reducing time and cost and ensuring safety.
- Conduct research to generate resources, tools, and training for risk communication, outreach, building relationships, and community engagement to empower under-resourced communities and communities with environmental justice concerns.
- Proceed with the development of sample collection protocols and analysis methods for inclusion in the Environmental Sampling & Analytical Methods (ESAM)⁵³¹ on-line tool. The ESAM detection, sampling, and analysis tool helps local, state, tribal, and federal emergency response field personnel and their supporting laboratories more efficiently respond to incidents, enabling smooth transitions of samples and data from the field to the laboratory to the decision makers.
- Utilize the Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft. ASPECT aids first responders by providing aerial surveillance screening for wide-area chemical, radiological, and nuclear detection, as well as infrared and advanced imagery products with real-time data delivery. ASPECT is pursuing a multi-

⁵³¹ For more information, please see: https://www.epa.gov/esam.

year strategic modernization and is poised to support relevant climate crisis and environmental justice missions.

- Operate and enhance the Portable High-Throughput Integrated Identification System (PHILIS). PHILIS units provide the Nation with mobile analytical "all hazards" confirmatory labs (qualitative and quantitative) with unique capability to analyze chemical and biological warfare threat agents. PHILIS provides on-scene, high-throughput analyses of air, soil, and water samples in areas that have experienced a significant incident. PHILIS can support risk mitigation of contaminated sites which face climate change impacts and affect disadvantaged communities by mobilizing laboratory capabilities to areas of need.
- Significantly overhaul the aging PHILIS capability. This modernization will upgrade the platform (mobility) and the laboratory (analytical equipment). The platform replacements will provide greatly improved long-distance mobility, reliability, maintenance and operating costs, and operational uniformity. The equipment investment will procure state-of-the-art systems to increase overall automation, throughput, and sensitivity of the PHILIS assets as well as bring parity in capabilities between the two ("East" and "West") PHILIS labs.
- Maintain a highly skilled, well-trained, and well-equipped response workforce that has the capacity to respond to simultaneous incidents as well as threats involving CBRN substances. This includes training On-Scene Coordinators and volunteers of the Response Support Corps (RSC) and members of Incident Management Teams. RSC volunteers provide critical support to headquarters and regional Emergency Operations Centers and assist with operations in the field. To ensure technical proficiency, this cadre of response personnel requires initial training and routine refresher training.

Performance Measure Targets:

Work under this program directly supports performance results in the Superfund: EPA Emergency Preparedness program under the Superfund appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$511.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$150.0) This program change is an increase in resources to support the protection of fenceline communities at risk from nearby oil and chemical facilities and underground storage tank releases.
- (+\$10,000.0) This program change is an increase in resources to replace outdated PHILIS equipment. These funds will allow the program to complete a PHILIS equipment upgrade, update all mobile lab technology, and replace vehicle platforms.

- (+\$112.0) This program change is an increase in resources to support core work in Homeland Security: Preparedness and Response activities.
- (+\$3.0) This program change is an increase in resources for research to enhance response capabilities by developing methods, tools, and information for site characterization and decontamination.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act, §§ 104, 105, and 106; Homeland Security Act of 2002.

Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security Goal: Safeguard and Revitalize Communities Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$4,915	\$4,959	\$5,139	\$180
Science & Technology	\$500	\$501	\$501	\$0
Building and Facilities	\$7,006	\$6,676	\$6,676	\$0
Hazardous Substance Superfund	\$845	\$1,030	\$1,530	\$500
Total Budget Authority	\$13,266	\$13,166	\$13,846	\$680
Total Workyears	9.2	9.2	9.2	0.0

Total workyears in FY 2023 include 9.2 FTE to support Homeland Security Working Capital Fund (WCF) services.

Program Project Description:

The federal government develops and maintains Continuity of Operations (COOP) plans and procedures that provide for the continued performance of its essential functions. The Homeland Security COOP Program works with other government and non-government organizations to ensure that Mission Essential Functions (MEFs) and Primary Mission Essential Functions (PMEFs) continue to be performed during emergency situations. The Department of Homeland Security/Federal Emergency Management Agency's (FEMA) Federal Continuity Directive-1 requires EPA to develop a continuity plan that ensures its ability to accomplish its MEFs from an alternate site, during a national disaster, continues and that the Agency be able to do so with limited staffing and without access to resources available during normal activities.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA will:

- Expand efforts under FEMA's Federal Mission Resiliency (FMR) directives including assessment of the FMR strategy, building upon existing National Continuity Policy, updating training and exercise materials to incorporate FMR constructs, and developing assessment tools to measure progress.
- Conduct selected annual reviews of regional COOP plans, PMEFs and MEFs, and make updates as needed.

- Monitor the continuity programs across the Agency, focusing on testing, training, and exercises as related to general COOP awareness and procedures.
- Undergo a monthly evaluation of the headquarters' COOP Program, including program plans and procedures, risk management, budgeting, and essential functions. Further, FEMA will perform an in-person biannual review of EPA's COOP Program and provide the results to the Administrator and to the Executive Office of the President.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$500.0) This program change is an increase in resources to support EPA's COOP implementation and training.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act §§ 104, 105, 106; Intelligence Reform and Terrorism Prevention Act of 2004; Homeland Security Act of 2002; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Indoor Air and Radiation

Radiation: Protection

Program Area: Indoor Air and Radiation Goal: Ensure Clean and Healthy Air for All Communities Objective(s): Reduce Exposure to Radiation and Improve Indoor Air

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$8,283	\$7,661	\$10,588	\$2,927
Science & Technology	\$1,645	\$1,735	\$2,224	\$489
Hazardous Substance Superfund	\$1,973	\$1,985	\$2,872	\$887
Total Budget Authority	\$11,901	\$11,381	\$15,684	\$4,303
Total Workyears	60.0	53.8	66.7	12.9

Program Project Description:

This program addresses potential radiation risks that may be found at Superfund and hazardous waste sites. Through this program, EPA ensures that Superfund site cleanup activities reduce and/or mitigate the health and environmental risks of radiation by including support of removal actions, as needed.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the FY 2022 - 2026 EPA Strategic Plan.

Work in this program directly supports protecting communities from hazardous waste and environmental damage, thereby protecting human health and the environment and contributing to the well-being of disadvantaged communities that may be disproportionately impacted by radioactive releases. In FY 2023, EPA's National Analytical Radiation Environmental Laboratory (NAREL) in Montgomery, Alabama, and National Center for Radiation Field Operations (NCRFO) in Las Vegas, Nevada, will continue to provide analytical and field support to manage and mitigate radioactive releases and exposures. These two organizations provide analytical and technical support for the characterization and cleanup of Superfund and hazardous waste sites.

NAREL and NCRFO provide data evaluation and assessment, document review, and field support through ongoing fixed and mobile analytical capability. Thousands of radiochemical analyses are performed annually at NAREL on a variety of samples from contaminated sites. NAREL is EPA's only radiological laboratory with in-house radiochemical analytical capability. NCRFO provides field-based technical support for screening and identifying radiological contaminants at Superfund and non-Superfund sites across the country, including air sampling equipment and expert personnel.

More specifically, these organizations focus on providing technical support and high-quality data to support agency decisions at sites across the country. They also develop guidance for cleaning up Superfund and other sites that are contaminated with radioactive materials.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$88.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$192.0) This change to fixed and other costs is an increase due to the recalculation of lab utilities.
- (+\$607.0 / +2.4 FTE) This program change is an increase in program capacity for activities such as analytical and field support to manage and mitigate radioactive releases and exposures at contaminated sites. This investment includes \$400.0 thousand in payroll costs and essential workforce support costs.

Statutory Authority:

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

Information Exchange / Outreach

Program Area: Information Exchange / Outreach Cross-Agency Mission and Science Support

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	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$13,713	\$14,084	\$14,413	\$329
Hazardous Substance Superfund	\$1,511	\$1,328	\$1,328	\$0
Total Budget Authority	\$15,224	\$15,412	\$15,741	\$329
Total Workyears	28.8	30.2	30.2	0.0

Program Project Description:

EPA's Environmental Information Exchange Network (EN) is a standards-based, secure approach for EPA and its state, tribal, and territorial partners to exchange and share environmental data over the internet. Capitalizing on advanced technology, data standards, open-source software, shared services for EPA's Digital Strategy, and reusable tools and applications, the EN offers its partners tremendous capabilities for managing and analyzing environmental data more effectively and efficiently, leading to improved decision-making.

The Central Data Exchange (CDX)⁵³² is the largest component of the EN Program and serves as the point of entry on the EN for environmental data transactions with the Agency. CDX provides a set of core shared services that promote a leaner and more cost-effective service framework for the Agency by avoiding the creation of duplicative applications. It enables faster and more efficient transactions for internal and external EPA clients, resulting in reduced burden.

Working in concert with CDX is EPA's System of Registries, which is a system of shared data services designed to enhance efficiency, reduce burden on the regulated community, and improve environmental outcomes, including environmental justice. EPA and EN partners routinely reference these shared data registries, from commonly regulated facilities and substances to the current list of federally recognized tribes. They identify the standard or official names for these assets, which, when integrated into EPA and partner applications, foster data consistency and data quality as well as enable data integration.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA will continue to support core functions for the EN information technology (IT) systems. The EN Program will continue to be a pivotal component of EPA's Digital Strategy that

⁵³² For more information on the Central Data Exchange, please see: https://cdx.epa.gov/.

supports business process change agencywide. Under this strategy and the 21st Century Integrated Digital Experience Act, ⁵³³ the Agency is streamlining business processes and systems to reduce reporting burden on states and regulated facilities and to improve the effectiveness and efficiency of environmental programs for EPA, states, and tribes. EPA also is responsible for managing EN technical governance groups and administering the pre- and post-award phases of the EN grants to states, tribes, and territories. These efforts support a standards-based, secure approach for EPA and its state, tribal, and territorial partners to efficiently exchange and share environmental data electronically. The Agency also administers and implements the Cross-Media Electronic Reporting Regulation (CROMERR) that removes regulatory obstacles for e-reporting to EPA programs under Title 40 of the Code of Federal Regulations (CFR).

EPA aims to reduce burden and avoid costs while improving IT. The Agency provisioned Virtual Exchange Services (VES), or virtual nodes, to facilitate data transactions supporting states and tribal partners. EPA will continue to carry out the baseline support for the adoption and onboarding of VES and associated services for EPA and its partners. This includes providing a technology framework – shared CROMERR services – which reduces the burden on programs and external reporters by providing CROMERR compliant solutions. For example, the shared electronic identity proofing and signature services for CROMERR support 31 partner regulatory reporting programs to date. EPA estimates that partners adopting shared CROMERR services save \$120 thousand in development and at least \$30 thousand in operations each year, which results in a cost avoidance of greater than \$2.5 million for EN partners.

In FY 2023, EPA will continue to improve the functionality and use of the System of Registries. ⁵³⁴ In addition to streamlining the Registries, EPA will launch a broader effort across the enterprise to engage organizations and facilitate the adoption of these data services through Cloud technology and Representational State Transfer (REST or RESTful) application programming interfaces (API). Registries are shared data services in which common data are managed centrally but shared broadly. They improve data quality in EPA systems, enable integration and interoperability of data across program silos, and facilitate discovery of EPA information. An example is the Agency's effort to promote the adoption of data services is the integration of tribal identification services (TRIBES) across EPA systems.

In FY 2023, EPA will continue implementing a solution related to shared facility identification information. Centralized facility management also is fundamental to better environmental management by bringing together EPA data across programmatic silos. Like facility data, substance information also is regulated across EPA programs, with many EPA programs relying on the Substance Registry Service (SRS) to improve data quality and reduce burden.

EPA tracks the number of registry webpages, users, and web service hits as one measure of usage. For example, the SRS website is visited by approximately 60 thousand users per month; many of these users visit SRS to understand regulatory information about chemicals. SRS also receives between 20 thousand and 140 thousand web service hits per month (depending on reporting cycles), mostly by EPA systems that have incorporated the web services into their online reporting

534 For more information, please see: https://ofmpub.epa.gov/sor_internet/registry/sysofreg/about/about.jsp.

⁵³³ For more information on the 21st Century Integrated Digital Experience Act, please refer to: https://www.congress.gov/115/plaws/publ336/PLAW-115publ336.pdf.

forms. Priorities for EPA registries include improving registry technologies by moving them into an open-source platform, so they are cloud-ready.

In FY 2023, EPA will maintain TRIBES, SRS, and the Registry of EPA Applications, Models and Data Warehouses (READ) in a cloud-based open-source platform. EPA will continue to expand the number of EPA and partner systems that integrate registry services into their online reports and systems, reducing burden and improving data quality. This includes updating EPA's dataset registry to allow EPA scientists, external partners, and others to share information and make information easier to find in the cloud.

In FY 2023, EPA will continue to work with the Department of Homeland Security's Customs and Border Protection (CBP) to maintain, utilize, and improve systems to facilitate the import and export of legitimate goods and leverage big data and artificial intelligence tools to identify and prevent or stop illegal goods from entering or leaving the United States. EPA supports over 20 data exchange types within EPA and with CBP to automate and streamline over 8 million annual import and export filings. This automation is essential for managing a significantly increasing number of imports and exports (*e.g.*, due in large part to e-Commerce) and allows coordinators/officers to focus on compliance monitoring and key high value targeting activities for non-compliant imports and exports, and to better coordinate with CBP.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• There is no change in program funding.

Statutory Authority:

Federal Information Security Management Act (FISMA); Clean Air Act (CAA); Clean Water Act (CWA); Toxic Substances Control Act (TSCA); Federal Insecticide Fungicide and Rodenticide Act (FIFRA); Resource Conservation and Recovery Act (RCRA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA).

IT/ Data Management/ Security

Information Security

Program Area: IT / Data Management / Security Cross-Agency Mission and Science Support

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	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$6,765	\$8,285	\$23,739	\$15,454
Hazardous Substance Superfund	\$752	\$659	\$7,859	\$7,200
Total Budget Authority	\$7,516	\$8,944	\$31,598	\$22,654
Total Workyears	16.6	13.1	17.1	4.0

Program Project Description:

Digital information is a valuable national resource and a strategic asset that enables EPA to fulfill its mission to protect human health and the environment. The Information Security Program's mission is to protect the confidentiality, availability, and integrity of EPA's information assets. The information protection strategy includes, but is not limited to; risk management, oversight, and training; network management and protection; and incident management.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*. EPA will work toward full compliance with the five high priority directives (Adoption of Multifactor Authentication, Encryption of Data At Rest, Encryption of Data In Transit, Zero Trust Architecture, and Event Logging) in Executive Order (EO) 14028: *Improving the Nation's Cybersecurity*. 535

Cybersecurity is a serious challenge to the Nation's security and economic prosperity. Effective information security requires vigilance and the ability to quickly adapt to new challenges. EPA maintains a robust, dynamic approach to cybersecurity risk management, governance, and oversight. In FY 2023, to further strengthen the Agency's security posture and to expand its risk management, continuous monitoring, security incident response programs, and to implement EO 14028, EPA requests an additional investment of \$7.2 million. The Agency will continue its partnerships with public and private sector entities to promote the adoption of cybersecurity best practices and reporting to the White House and Congress on the status of these initiatives.

EPA will continue to strengthen information technology (IT) assets and develop resiliency against potential cybersecurity threats. This work includes increasing implementation of multifactor authentication to strengthen access controls to data and increasing implementation of encryption for Data at Rest and Data in Transit to protect data. EPA has prioritized investments in specific capabilities that protect and defend the most sensitive systems and information, including those

⁵³⁵ For more information on EO 14028, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/05/12/executive-order-on-improving-the-nations-cybersecurity/.

designated as high-value assets. These investments will ensure protections are in place commensurate with the impact of their potential compromise.

Risk Management, Oversight, and Training:

In FY 2023, EPA will continue to include cybersecurity and privacy components in ongoing senior leadership program reviews. These reviews enhance Chief Information Officer (CIO) oversight by enabling better risk area determination and targeted improvement direction to system and mission program managers. While EPA programs and regions maintain responsibility for improving their performance in specific cybersecurity measures, EPA's senior leadership routinely reviews performance results and potential challenges for achieving continuous improvement.

In FY 2023, the Agency will continue to collect Federal Information Security Modernization Act (FISMA)⁵³⁶ metrics and evaluate related processes, tools, and personnel to identify areas of weakness and opportunities for improvement. EPA's CIO, who also is the Senior Agency Official for Privacy (SAOP), in coordination with the Chief Information Security Officer, will continue to monitor and report on these metrics, in line with Office of Management and Budget Memorandum (OMB) M-22-05 Fiscal Year 2021-2022 Guidance on Federal Information Security and Privacy Management Requirements.⁵³⁷

The Agency will continue to update policies and procedures in line with the National Institute of Standards and Technology (NIST) in compliance with the release of Special Publications 800-53r5, Security and Privacy Controls for Information Systems and Organizations. These updates will help to implement a series of controls to address increased threats in the information environment.

In compliance with OMB Memorandum M-21-30, *Protecting Critical Software Through Enhanced Security Measures*, ⁵³⁹ the Agency continues to work on refinements to improve the ability to track and report on critical software used by the Agency in compliance with Federal Information System Reporting and OMB direction.

EPA will further enhance Agency-specific role-based training to ensure personnel in key cybersecurity roles have the skills, knowledge, and capabilities to effectively support EPA's cybersecurity posture.

Network Management and Protection:

In accordance with OMB Memorandum M-22-09 Moving the U.S. Government Toward Zero Trust Cybersecurity Principles,⁵⁴⁰ EPA will continue to review and improve controls across several

⁵³⁶ Including those found in Federal Information Security Modernization Act of 2014 and Federal Information Security Cybersecurity Act of 2015.

⁵³⁷ For more information, please see https://www.whitehouse.gov/wp-content/uploads/2021/12/M-22-05-FY22-FISMA-Guidance.pdf.

For more information, please see: https://csrc.nist.gov/publications/detail/sp/800-53/rev-5/final.

⁵³⁹ For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/08/M-21-30.pdf.

⁵⁴⁰ For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2022/01/M-22-09.pdf.

pillars as outlined in Zero Trust Architecture: protecting identity management capabilities through authentication infrastructure and system configurations. Agency staff will continue to use enterprise-managed identities to access the applications they use in their work and evaluate current solutions to ensure they are resilient to malicious phishing campaigns and can protect EPA assets from sophisticated online attacks. The Agency will continue streamlining processes for hardware and software inventory management, including the implementation of a Configuration Management Database. The Agency will continue to assess existing Encryption for Data at Rest and Data in Transit implementation and work to optimize these encryption capabilities to ensure critical information and network traffic is encrypted. EPA also will embark on an enterprise effort to perform detailed analysis of isolated environments and work on integrating those environments with continuous monitoring capabilities to reduce risk.

In FY 2023, EPA will continue to strengthen cloud security monitoring and access to sensitive data, cyber incident response, and cloud platform management services, which will enable remote workers to securely use systems and services in the cloud while also improving application performance and reducing costs associated with Trusted Internet Connections (TIC). The Agency also will mature use of web content filtering tools to prevent malicious and unauthorized web content from impacting EPA systems and users. The Agency will continue to build an Insider Threat Program for the unclassified network to monitor Privileged Users and Systems Administrators activity, as recommended by several cybersecurity assessments, and to monitor and report on EPA networks and systems.

By moving towards using Zero Trust Architecture, EPA can further strengthen network resiliency and reliability. The development of networks which can resist malevolent actions regardless of their origin is an information security priority. Zero Trust Architecture will grant authorized users with full access to the tools and resources needed to perform their jobs but limit further access to unnecessary areas. Proper permissions for a given user's needs is a critical component of Zero Trust Architecture, and coding for more granular control over the network environment is an information security priority.

Incident Management:

Cyberattacks across critical infrastructure sectors are rapidly increasing in volume and sophistication, impacting both IT and operational technology systems. EPA's Agency IT Security and Privacy (AITSP) Program enables agencywide implementation, management, and oversight of the CIO's Information Security and Privacy Programs through continuous monitoring functions. Continuous monitoring capabilities, which serve to identify and address security vulnerabilities and incidents quickly, are vital to ensure that EPA's information environment remains safe.

In FY 2023, EPA will continue to support the ongoing implementation of capabilities for data labeling and data loss prevention, as well as remote computer imaging and forensics, all of which

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⁵⁴¹ For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2019/09/M-19-26.pdf.

⁵⁴² These assessments include Annual Assessments and Classified briefings with the Department of Homeland Security and EPA's Office of Homeland Security, as well as a 2017 OIG Report, available at: https://www.epa.gov/sites/production/files/2017-10/documents/epaoig_20171030-18-p-0031.pdf.

will improve security information and event management by collecting, synthesizing, managing, and reporting cybersecurity events for systems across the Agency.

The Information Security Program supports EPA's Security Operations Center (SOC), which manages the Computer Security Incident Response Capability (CSIRC) processes to support identification, response, alerting, and reporting of suspicious activity. In accordance with OMB Memorandum M-21-31 *Improving the Federal Government's Investigative and Remediation Capabilities Related to Cybersecurity Incidents*, ⁵⁴³ in FY 2023, EPA will continue to mature the system logging capabilities to meet Event Logging (EL) Level 2 for Intermediate Logging requirements of highest and intermediate criticality and EL Level 3 for Advanced Logging requirements at all criticality levels. Through CSIRC, EPA will continue to maintain relationships with other federal agencies and law enforcement entities, as needed, to support the Agency's mission. The incident response capability includes components such as detection and analysis, forensics, and containment and eradication activities.

In compliance with EO 14028, the Security Operations Center will continue maturation and refinement of Agency's Incident Response procedures in compliance with the Cybersecurity and Infrastructure Security Agency's Playbook for Responding to Cybersecurity Vulnerabilities and Incidents. In compliance with OMB Memorandum M-22-01 *Improving Detection of Cybersecurity Vulnerabilities and Incidents on Federal Government Systems through Endpoint Detection and Response*, ⁵⁴⁴ the Agency's Security Operations Center will work to the Agency's Security Operations Center will work to integrate End Point Detection and Response (EDR) capabilities with the Continuous Diagnostics and Mitigation Program to support proactive detection of cybersecurity incidents within EPA's information environment, active cyber hunting, containment and remediation, and incident response. EPA will continue modernizing its network and system logging capabilities (on-premises systems and connections hosted by third parties, such as Cloud Service Providers) for both investigation and remediation purposes.

Additionally, the Agency continues to mature Coordinated Vulnerability Disclosure (CVD), through program expansion and improved notification, response, and reporting activities. By working with internal stakeholders, private industry, and federal organizations to communicate vulnerabilities discovered or encountered, CVD decreases the harm or time an adversary can use to deny or disrupt services to the networks.

EPA leverages capabilities through the Continuous Diagnostics and Mitigation (CDM) Program, which addresses agencies' cybersecurity protection gaps and allows EPA to efficiently identify and respond to federal-wide cybersecurity threats and incidents. In FY 2023, as part of the work with the Department of Homeland Security to support implementation of current and future Phase CDM requirements, the CDM Program continue closing remaining gaps in privileged access to EPA's network and continue to provide critical security controls for the Agency's cloud applications. The CDM Program also will review interior EPA network boundary protection from interconnections to external networks, expand endpoint detection and response capabilities, and

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⁵⁴³ For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/08/M-21-31-Improving-the-Federal-Governments-Investigative-and-Remediation-Capabilities-Related-to-Cybersecurity-Incidents.pdf.

⁵⁴⁴ For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/10/M-22-01.pdf.

integrate mobile device discovery to expand program capabilities. In FY 2023, EPA estimates a \$13.4 million budget for the CDM Program.

Supply Chain Risk Management:

In FY 2023, EPA will continue to develop the Agency's program to implement Cybersecurity Supply Chain Risk Management Security Controls to comply with the Government Accountability Office (GAO) findings⁵⁴⁵ and *NIST 800-53 Rev 5 Security and Privacy Controls for Information Systems and Organization*. This work includes coordinating across the Agency with professionals from Information Technology, Information Security, and Procurement to update the policy and obtain the necessary tools to address these critical security requirements, which were a vulnerability in the Log4J FY 2022 intrusion. In compliance with Executive Order 14028, Sec. 4. *Enhancing Software Supply Chain Security*, EPA will implement standards, procedures, and criteria to harden and secure software development environments, and investigate the addition of automated tools to secure the development environment.

Performance Measure Targets:

(PM MFA) Percentage of EPA systems in compliance with multifactor	FY 2022 Target	FY 2023 Target
authentication requirements.	75	85

(PM DAR) Percentage of EPA data at rest in compliance with encryption	FY 2022 Target	FY 2023 Target
requirements.		No Target
		Established

(PM DIT) Percentage of EPA data in transit in compliance with encryption	FY 2022 Target	FY 2023 Target
requirements.		No Target Established

(PM ZTA) Percentage implementation of an approved "Zero Trust	FY 2022 Target	FY 2023 Target
Architecture."		No Target Established

(PM ALR) Implementation of advanced event logging requirements (EL3) across EPA networks.	FY 2022 Target	FY 2023 Target
actoss Ef A hetworks.	EL1	EL3

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⁵⁴⁵ Government Accountability Office Report on information and communications technology (ICT) Supply Chain: GAO-21-1645U

⁵⁴⁶ For more information, please see: https://csrc.nist.gov/publications/detail/sp/800-53/rev-5/final.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$7,200.0) This program change supports enhancements to protect the Agency's information technology infrastructure and advance the implementation of Executive Order 14028: *Improving the Nation's Cybersecurity*. This investment will increase EPA's information technology resiliency and limit vulnerabilities in the event of a malicious attack.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Cybersecurity Act of 2015; Federal Information Security Modernization Act (FISMA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA).

IT / Data Management

Program Area: IT / Data Management / Security Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$74,013	\$82,715	\$98,452	\$15,737
Science & Technology	\$2,782	\$3,072	\$3,195	\$123
Hazardous Substance Superfund	\$20,984	\$13,826	\$16,904	\$3,078
Total Budget Authority	\$97,779	\$99,613	\$118,551	\$18,938
Total Workyears	467.8	482.4	486.4	4.0

Total workyears in FY 2023 include 172.0 FTE to IT/Data Management working capital fund (WCF) services.

Program Project Description:

The work performed under the Information Technology/Data Management (IT/DM) Program supports human health and the environment by providing critical IT infrastructure and data management. The Program ensures analytical support for interpreting and understanding environmental information; exchange and storage of data, analysis, and computation; rapid, secure, and efficient communication; and access to scientific, regulatory, policy, and guidance information needed by the Agency, regulated community, and the public.

This program supports the maintenance of EPA's IT and Information Management (IT/IM) services that enable citizens, regulated facilities, states, and other entities to interact with EPA electronically to access, analyze and understand, and share environmental data on-demand. The IT/DM Program also provides support to other IT development projects and essential technology to EPA staff, enabling them to conduct their work effectively and efficiently in the context of federal IT requirements, including the Federal Information Technology Acquisition Reform Act (FITARA); Technology Business Management (TBM); Capital Planning and Investment Control; and the Open, Public, Electronic, and Necessary Government Data Act.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

EPA requests \$1.6 million in FY 2023 to establish a dedicated funding source for the maintenance and modernization of the Agency's enterprise network switch infrastructure necessary for the operations of the EPA network including data centers. This funding ensures critical infrastructure is replaced when it reaches end of life/end of support. Failure to replace switch infrastructure may result in network degradation, which leaves EPA vulnerable to cybersecurity threats, and can disrupt operations.

The Agency also requests an increase of \$4.7 million and 4 FTE across the EPM and Superfund appropriations to support implementation of the Agencywide Digitization Strategy, which includes the operation of two EPA digitization centers and the development and operation of a modernized records Management Technology, which is necessary to meet the requirements of Memoranda M-19-21 *Transition to Electronic Records* ⁵⁴⁷ issued by the Office of Management and Budget and the National Archives and Records Administration. EPA will leverage artificial intelligence and machine learning to assist staff with appropriately scheduling electronic records that are saved to the Record Management Technology. EPA will operate the Paper Asset Tracking Tool and Content Ingestion Services to track paper records as they are submitted and processed through the digitization centers.

EPA also will continue to maintain and manage its core IT/ DM services, including Information Collection Requests, the National Library Network, the Agency's Docket Center, and EPA's Section 508 Program. The Agency also will continue implementing the 21st Century Integrated Digital Experience Act (P.L. 115-336), which includes modernization of public-facing websites and digital services, as well as digitization of paper forms and non-digital services. EPA will finalize a complete inventory of the Agency's paper forms, develop the process to digitize these forms in compliance with the 21st Century Integrated Digital Experience Act, and begin digitizing the forms. EPA's Controlled Unclassified Information Program also will continue work to standardize, simplify, and improve information management and IT practices to facilitate the sharing of important sensitive data within the Agency, with key stakeholders outside of the Agency, and with the public, meeting federal standards as required by Executive Order 13556: Controlled Unclassified Information. 548

In FY 2023, EPA will further strengthen its IT acquisition and portfolio review process as part of the implementation of FITARA. In the most recent FITARA scorecard, released in December 2021, ⁵⁴⁹ EPA scored an overall B+, the third highest rating among Chief Financial Officers Act agencies.

In FY 2023, EPA will continue work on converting prioritized internal administrative paper or analog workflows into modern digital workflows to speed up common administrative tasks, reduce burdensome paperwork for EPA employees and managers, and improve internal data collection and reporting. This work will build on work completed in FY 2022 to identify a set of processes which will yield the greatest benefit for the Agency upon automation and to complete a high priority pilot automation project.

EPA's Customer Experience (CX) Program will focus on improving the mission support experience of EPA staff to improve their ability to serve the public. The Program focuses on collaborations such as the System Lifecycle Management process, which collects feedback from IT professionals, regions, programs, and other stakeholders to improve the EPA system development process. In FY 2023, the CX Program will collect customer feedback, conduct data

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⁵⁴⁷ For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2019/08/M-19-21-new-2.pdf.

⁵⁴⁸ For more information, please refer to EO 13556: https://www.federalregister.gov/documents/2010/11/09/2010-28360/controlled-unclassified-information.

⁵⁴⁹ For additional information, please refer to: https://fitara.meritalk.com/.

analytics, assess priorities within a governing community of practice, and present recommendations to senior leaders to allocate resources to improve CX initiatives.

The Agency's Chief Technology Officer, Chief Architect, and Chief Data Officer will continue to enhance enterprise software development and architecture capabilities, including application development, deployment approaches, and technical platform support. EPA will identify and prioritize the interoperability of data within EPA and across federal agencies that benefits internal and public-facing services. Driven by demand from federal partners, EPA will identify opportunities to share data with other federal partners in the National Secure Data Service. EPA will support data collection in a few priority areas, where required, to improve our efforts to address our learning agenda priority questions, environmental justice, and other agency efforts focused on civil rights and equity challenges.

In FY 2023, the Agency will continue to support the essential capabilities of GeoPlatform, a shared technology enterprise for geospatial information and analysis. By implementing geospatial data, applications, and services such as the Facility Registry System, the Agency can integrate, interpret, and visualize multiple data sets and information sources to support environmental decisions. The Agency will complete developing and increasing capabilities of EPA's Data Management and Analytics Platform, which has both internal and public facing elements such as Envirofacts. EPA will partner with other agencies, states, tribes, and academic institutions to propose innovative ways to use, analyze, and visualize data through EPA's Data Management and Analytics Platform. After completing an alternatives analysis for regulatory data, EPA will begin implementing an enterprise full data life cycle approach for managing regulated facility data.

In FY 2023, the Agency's One EPA Web will continue to manage content and support internal and external users with information on EPA business, support employees with internal information, and provide a clearinghouse for the Agency to communicate initiatives and successes. EPA also will continue to upgrade its web infrastructure, ensuring that it meets current statutory and evolving security requirements.

Performance Measure Targets:

Work under this program supports performance results in the Information Technology/Data Management Program under the EPM appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$218.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$1,550.0) This change to fixed and other costs is an increase to provide funding for the enterprise network switch infrastructure necessary for the operations of the EPA network including data centers. This funding ensures critical infrastructure is replaced when it reaches end of life/end of support. Failure to replace switch infrastructure may result in

network degradation, leave EPA vulnerable to cybersecurity threats, and disrupt EPA operations.

• (+\$1,310.0) This program change is an increase to support operations of EPA's National Digitization Program and enterprise-wide records management system, which provide for the centralized management and digitization of the Agency's records in an electronic manner. This investment will improve records management, reduce records costs across EPA programmatic offices, and enable EPA to comply with statutory requirements under the Federal Records Act.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Federal Information Technology Acquisition Reform Act; Federal Information Security Modernization Act (FISMA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA); Rehabilitation Act of 1973 § 508.

Legal / Science / Regulatory / Economic Review

Alternative Dispute Resolution

Program Area: Legal / Science / Regulatory / Economic Review Goal: Enforce Environmental Laws and Ensure Compliance Objective(s): Hold Environmental Violators and Responsible Parties Accountable

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$533	\$864	\$1,175	\$311
Hazardous Substance Superfund	\$632	\$832	\$868	\$36
Total Budget Authority	\$1,165	\$1,696	\$2,043	\$347
Total Workyears	2.1	5.9	6.9	1.0

Program Project Description:

EPA's Alternative Dispute Resolution (ADR) Program offers cost-effective processes for preventing and resolving conflicts on Superfund Program matters as an alternative to litigation. The Program provides facilitation, mediation, public involvement, training, consensus building advice and support, and legal counsel. The Program supports the use of ADR in the Superfund Program's work with communities and Potentially Responsible Parties.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Hold Environmental Violators and Responsible Parties Accountable in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA will continue to provide conflict prevention and ADR services on Superfund Program matters. This program also supports implementation of Executive Order (EO) 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government. 550

Specifically, ADR will:

- Continue to administer its five-year, \$53 million Conflict Prevention and Resolution Services contract. The contract supports more than 20 Superfund projects by providing facilitators to work with Community Advisory Groups and is expected to take on an additional 10-15 sites in FY 2023.
- Directly provide the above services through the conflict resolution specialists on staff. The ADR Program expects to directly support agency programs and stakeholders by providing facilitation of public meetings, mediation, or other consensus building support on two to four Superfund projects.

⁵⁵⁰ For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.

- Provide training to EPA staff in conflict resolution concepts and skills. The ADR Program
 offers this training through its cadre of eight interactively designed courses to all national
 program offices and regional offices. Adapting to a virtual environment in FY 2021 has
 allowed the ADR Program to reach Superfund Community Involvement Coordinators in
 each of the 10 EPA regions and expects that to increase in FY 2023.
- Help to achieve the goals of President Biden's Justice 40 initiative by tracking the number of CPRC projects in which services are provided to disadvantaged communities.

The following are examples of FY 2021 accomplishments supporting the Superfund Program:

- Provided facilitation and mediation assistance for more than 30 Superfund projects, both in HQ and in all EPA regions, including multiple sites with challenging community engagement issues.
- Conducted a conflict assessment through in-depth community interviews prior to a large public meeting for the Baird & McGuire Superfund Site in Region 1. The assessment report summarized key stakeholder concerns to inform the public meeting agenda, and it provided the site team with essential information about community concerns as they consider a change to the site remedy.
- Provided facilitation services to support multi-party negotiations at the Pristine, Inc. Superfund Site in Region 5. The facilitator conducted interviews and meetings with key parties to address the status of remediation and facilitated sessions with the hydrogeologists on site conditions and the current approach to remediation. The process reduced conflict among the parties and led to a better understanding of options for future remediation.
- Provided training support for Superfund audiences, including a new conflict management course for Remedial Project Managers at Federal Facility sites, a course on engaging constructively in difficult conversations for all Superfund staff, and a requested short training on the process of Appreciative Inquiry for Superfund Community Involvement staff.

Performance Measures Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$33.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

• (+\$3.0) This program change is an increase to support core capacity on Superfund Program alternative dispute resolution matters.

Statutory Authority:

Administrative Dispute Resolution Act (ADRA) of 1996; Negotiated Rulemaking Act of 1996; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Legal Advice: Environmental Program

Program Area: Legal / Science / Regulatory / Economic Review Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$55,700	\$49,595	\$76,855	\$27,260
Hazardous Substance Superfund	\$1,161	\$443	\$461	\$18
Total Budget Authority	\$56,862	\$50,038	\$77,316	\$27,278
Total Workyears	257.6	263.9	316.5	52.6

Total workyears in FY 2023 include 8.8 FTE funded by TSCA fees and 17.1 FTE to support Legal Advice working capital fund (WCF) services.

Program Project Description:

The Legal Advice: Environmental Program provides legal representation, legal counseling, and legal support for environmental activities under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Funding supports legal advice needed in the Superfund Program's extensive work to clean up contaminated sites, which advances environmental justice for neighboring communities and supports EPA's state, tribal and local partners. For example, the Program provides legal analysis and advice to help inform EPA's decisions regarding the assessment of certain contaminants at a given Superfund site under federal law, and a party's potential liability under CERCLA.

The Program supports EPA's Superfund work at thousands of sites spanning the wide array of Superfund legal issues regarding removal and remedial cleanups costing billions of dollars. The Program is essential to providing the high-quality legal work to ensure that EPA's decisions protect human health and the environment.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2023, EPA will prioritize its legal support capabilities for the Superfund Program in order to assist with the Administration's priorities including: tackling the climate crisis, advancing environmental justice, and supporting state, tribal and local partners. The Program will work to support CERCLA activities and these priorities, to include: counseling on how to address environmental justice and climate resiliency in EPA's remedy decisions at Superfund sites, defensibility of agency actions, drafting significant portions of agency actions, and participating in litigation in defense of agency actions.

The Program will continue to provide key legal advice related to designating Per- and polyfluoroalkyl substances (PFAS) as a CERCLA hazardous substance, an action that would significantly advance environmental justice for communities across the country impacted by PFAS. Legal review is critical to the Superfund Program at many points throughout the cleanup process. This program also provides legal advice and counseling for final rules adding Superfund sites to the National Priorities List (NPL), an important step in advancing cleanup at the Nation's most contaminated sites. This benefits states, tribes, and local communities, who may not have adequate resources to address these sites on their own.

The following are examples of recent favorable case outcomes and FY 2021 accomplishments, which illustrate this program's important role in implementing the Agency's core priorities and mission:

- Favorable Decisions in Superfund Litigation (*Troy Chemical Corp. v. EPA*, No. 14-1290 (D.C. Cir. November 13, 2020); *State of NY v. EPA*, 1:19-cv-1029 (N.D.N.Y. Mar. 11, 2021); *Resort Center v. EPA*, No. 2:21-cv-00078 (D. Utah); and *Tetra Tech v. EPA*, No. 4:20-cv-08100 (N.D. Ca.)): Served as the Agency lead in successfully defending EPA actions at four Superfund sites. In *Troy*, the Solid Waste and Emergency Response Law Office (SWERLO) served as the Agency lead in the D.C. Circuit case challenging EPA's placement of the Pierson's Creek Superfund site in Newark, New Jersey, on the Superfund National Priorities List (NPL). The D.C. Circuit upheld EPA's listing. SWERLO also served as the Agency lead in litigation by the State of New York challenging EPA's issuance of a Certification of Completion to General Electric at the Hudson River PCBs Superfund Site. The court dismissed New York's claims in total. In *Resort Center*, SWERLO developed a successful defense that resulted in dismissal of multiple claims (under CERCLA, takings and tort) related to the Richardson Flat site. Finally, SWERLO served as the Agency lead in winning a motion to dismiss (without prejudice) a case related to remedy selection at the Former Hunters Point Naval Shipyard.
- <u>Legal Support on PFAS</u>: Provided a significant amount of critical legal advice on a top Administration priority of addressing PFAS contamination. SWERLO has counseled on multiple issues, including designation of perfluorooctanoic acid (PFOA)/perfluorooctane sulfonate (PFOS) as CERCLA hazardous substances, the use of CERCLA authority to compel potentially responsible parties to address PFAS, the use of Resource Conservation and Recovery Act (RCRA) corrective action authority for PFAS, and the impacts of proposed legislation on EPA's authorities. SWERLO also represented EPA's interests in the development of the U.S. litigating position in defensive litigation related to PFAS contamination at military bases.
- Partial Favorable Decision in Gold King Mine litigation (Updated): (In re Gold King Mine Release, No. 1:18-md-02824, (D.N.M., May 13, 2021)). Served as the Agency lead in multidistrict litigation in which New Mexico, the Navajo Nation, and individual plaintiffs allege \$300 million in damages related to the 2015 Gold King Mine release. Based on a legal argument that SWERLO developed, the district court dismissed a novel Clean Water Act claim for lack of jurisdiction due to EPA's ongoing CERCLA work at the Bonita Peak Mining District Superfund Site. Additionally, SWERLO led EPA's efforts on fact

discovery, overseeing collection of over a half-million documents, preparing EPA employees for depositions, and responding to a motion for sanctions.

• Legal Support on briefs to Supreme Court: (Guam v. United States, No. 20-382, (S. Ct. May 24, 2021) and FMC Corporation v. Shoshone-Bannock Tribes, No. 19-1143, (S. Ct., Jan. 11, 2021). Served as agency lead in representing EPA's interest to the Department of Justice in the development of the U.S. position on a pending case and separate petition for certiorari before the U.S. Supreme Court. The central issue in Guam was whether an EPA consent decree (entered under the Clean Water Act) precluded Guam from seeking contribution from the Navy under CERCLA. The case had significant implications for EPA's enforcement program, and SWERLO worked diligently to develop the Agency's legal position, coordinate with the enforcement program, the Superfund cleanup program and the Region, and prepare the OGC Front Office for high-level discussions with DOJ on the Agency's position. In FMC, SWERLO and the Cross-Cutting Issues Law Office developed legal arguments for this complex case involving the intersection of environmental response actions and Indian law.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$15.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$3.0) This program change is an increase to provide legal representation, legal counseling, and legal support for EPA's Superfund Program.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Operations and Administration

Acquisition Management

Program Area: Operations and Administration Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$30,623	\$32,247	\$40,017	\$7,770
Leaking Underground Storage Tanks	\$245	\$132	\$132	\$0
Hazardous Substance Superfund	\$23,380	\$23,800	\$32,345	\$8,545
Total Budget Authority	\$54,248	\$56,179	\$72,494	\$16,315
Total Workyears	275.1	285.7	355.7	70.0

Program Project Description:

Superfund resources in the Acquisition Management Program support EPA's contract activities, which cover planning, awarding, and administering contracts for the Agency. Efforts include issuing acquisition policy and interpreting acquisition regulations; administering training for contracting and program acquisition personnel; providing advice and oversight to regional procurement offices; and providing information technology (IT) improvements for acquisition.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Agency requests an investment of \$8.5 million and 35.0 FTE to strengthen EPA's capacity to process new, increased, and existing award contract actions in a timely manner; advance EPA utilization of small and disadvantaged businesses; support "Made in America" initiatives; and support supply chain risk management activities for information and communication technology. This program will continue to assist the Agency in its efforts to process and award contract actions in a timely manner and in accordance with Federal Acquisition Regulation (FAR) and guidance from the Office of Management and Budget (OMB) Office of Federal Procurement Policy (OFPP). Timely and equitable procurement are crucial to EPA's mission.

In FY 2023, EPA will continue to support the implementation of supply chain risk requirements in Section 889 of the 2019 National Defense Authorization Act and the "Made in America Laws" referenced in Executive Order 14005, *Ensuring the Future Is Made in All of America by All of America's Workers*, ⁵⁵¹ while furthering Category Management implementation requirements. EPA also will focus on establishing a comprehensive architecture for the Agency's supply chain as well

⁵⁵¹ For additional information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/25/executive-order-on-ensuring-the-future-is-made-in-all-of-america-by-all-of-americas-workers/.

as mechanisms to identify and mitigate risk. EPA also will continue to identify activities and resources to modernize the acquisition process that will allow the Agency to connect with a more diverse business base to address inequities in the acquisition process and, thus, build domestic markets and capabilities.

In FY 2023, EPA will continue working to eliminate barriers to full and equal participation in agency procurement and contracting opportunities for all communities including underserved communities. The Agency will promote the equitable delivery of government benefits and opportunities by making contracting and procurement opportunities available on an equal basis to all eligible providers of goods and services. This work aims to increase the percentage of EPA contract spend awarded to small businesses located in Historically Underutilized Business Zones (HUBZones). EPA's acquisition equity assessment and related industry listening sessions confirmed that small and disadvantaged businesses face unique challenges in accessing procurement opportunities. These businesses often lack dedicated resources and in-house capacity to master the myriad of complex federal requirements needed to capitalize on agency acquisition and financial assistance opportunities.

In FY 2023, in support of Administration climate sustainability initiatives, EPA will work with applicable program offices to identify and prioritize procurement plans that spur innovation, commercialization, and deployment of clean energy technologies.

EPA remains committed to leveraging Category Management, Spend Under Management (SUM), Best-In-Class (BIC), and strategic sourcing principles in each of its programs and purchasing areas to save taxpayer dollars and improve mission outcomes. In FY 2023, EPA will continue to leverage data provided by the General Service Administration and implement spend analysis, trend analysis, and data visualization tools to measure progress toward the implementation of Category Management and the adoption of Federal Strategic Sourcing vehicles and BIC acquisition solutions.

OMB's Category Management focuses on total acquisition spend transitioned from contract vehicles that are unaligned with Category Management principles to the SUM Program. In accordance with OMB Memorandum M-22-03, *Advancing Equity in Federal Procurement*, ⁵⁵² EPA revised its Acquisition Guidance section 8.0.100, *Requirements for Mandatory Use of Common Contract Solutions*, to add clarification of the SUM Tier 2-SB designation which is afforded to contracts of any size awarded to small and disadvantaged businesses. The revision emphasizes EPA's focus on small business utilization and ensures continued alignment with federal category management and equity goals. EPA is currently projecting to reach its FY 2023 OMB-designated SUM spend goal of 52 percent of total addressable spend. The Agency has initiated a Category Management strategy for IT and will award a consolidated/enterprise-wide mission support services contract for the Office of Land and Emergency Management as a SUM Tier 1 solution.

Additionally, EPA is initiating strategic sourcing initiatives in the following areas while directing requirements resulting from the increased Bipartisan Infrastructure Law funding to SUM solutions:

⁵⁵² For additional information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/12/M-22-03.pdf.

- New Laboratory Equipment Maintenance solution
- Cell services (recompete)
- CyberFEDS resources software
- Office of Air & Radiation EARTH Agency-wide professional services solution
- Subscription solutions

In FY 2023, EPA will continue to implement SUM principles to leverage pre-vetted agency and government-wide contracts as part of the Agency's effort to utilize more mature, market-proven acquisition vehicles. Through SUM Tier 2 and BIC solutions, EPA will leverage acquisition experts to optimize spending within the government-wide category management framework and increase the transactional data available for agency level analysis of buying behaviors. To modernize the acquisition process and remove barriers to entry for obtaining government contracts, EPA has developed two innovative tools available agencywide: the EPA Solution Finder, which provides solution and ordering information for all EPA enterprise-wide contract solutions; and the BIC Opportunity Tool, which recommends BIC solutions to address newly identified agency requirements for commodities and services and those supported on expiring contracts.

EPA also will continue to maximize its Strategic Sourcing Program (SSP), thereby enhancing purchase coordination, improving price uniformity and knowledge-sharing, and leveraging small business capabilities to meet acquisition goals. The SSP allows the Agency to research, assess, and award contract vehicles that will maximize time and resource savings. The SSP serves as a foundation for effective financial and resource management because it simplifies the acquisition process and reduces costs. Long-term implementation of the SSP is transforming the Agency's acquisition process into a strategically driven function, ensuring maximum value for every acquisition dollar spent. In the first quarter of FY 2022, EPA realized \$9.6 million cost avoidance in specific, measurable costs for: five agencywide software solutions; print services; cellular services; shipping; voice services; office supplies; lab supplies; computers; furniture and furniture management services; and laboratory equipment maintenance. Since the beginning of the Strategic Sourcing Program in FY 2013, EPA has achieved cost avoidance of \$38.1 million.

In FY 2023, EPA will continue to evaluate options for replacing the EPA Acquisition System with an approved government-wide Federal Shared Service Provider for a contract writing system in line with government-wide mandates to increase the use of shared services. The Agency is focusing on a modern acquisition solution that reduces costs while increasing efficiency by standardizing federal procurement planning, contract award, administration, and close-out processes. Transition preparations include data management strategies, business process reviews, and user engagement to develop a business case and ensure data elements conform with Federal Government Procurement standards. As part of this effort, in FY 2023, EPA will utilize a new Government-wide Unique Entity Identifier for acquisition awards in line with General Services Administration and OMB requirements. EPA also will continue implementing the Financial

⁵⁵³ OMB-19-16 "Centralized Mission Support Capabilities for the Federal Government", for more information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2019/04/M-19-16.pdf.

Information Technology Acquisition Reform Act (FITARA)⁵⁵⁴ by competing contracts with multiple vendors or confining the scope of the contract to a limited task, thereby avoiding vendor lock-in, and developing acquisition vehicles that support the Agency in FITARA compliance and implementation.

Performance Measure Targets:

Work under this program supports performance results in the Small Minority Business Assistance Program under the EPM appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$2,241.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$6,304.0 / +35.0 FTE) This program change will strengthen EPA's capacity to process new, increased, and existing award contract actions in a timely manner; advance EPA utilization of small and disadvantaged business; and support "Made in America" initiatives. This investment includes \$6.27 million in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

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⁵⁵⁴ For additional information, please refer to: https://www.congress.gov/113/plaws/publ291/PLAW-113publ291.pdf#page=148%5D.

Central Planning, Budgeting, and Finance

Program Area: Operations and Administration Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$71,528	\$76,718	\$89,154	\$12,436
Leaking Underground Storage Tanks	\$343	\$416	\$448	\$32
Hazardous Waste Electronic Manifest System Fund	\$154	\$0	\$0	\$0
Hazardous Substance Superfund	\$26,775	\$26,561	\$28,806	\$2,245
Total Budget Authority	\$98,800	\$103,695	\$118,408	\$14,713
Total Workyears	438.8	462.0	470.0	8.0

Total workyears in FY 2023 include 2.0 FTE funded by TSCA fees.

Program Project Description:

EPA's financial management community maintains a strong partnership with the Superfund Program. EPA's Office of the Chief Financial Officer (OCFO) supports this continuing partnership by providing a full array of financial management support services and systems necessary to pay Superfund bills and recoup cleanup and oversight costs for the Trust Fund. EPA's OCFO manages Superfund activities under the Central Planning, Budgeting, and Finance Program in support of integrated planning, budget formulation and execution, financial management, performance and accountability processes, financial cost recovery, and systems to ensure effective stewardship of Superfund resources. This program supports the requirements of the Government Performance and Results Modernization Act (GPRMA) of 2010;⁵⁵⁵ Digital Accountability and Transparency (DATA) Act of 2014;⁵⁵⁶ the Federal Information Technology Acquisition Reform Act (FITARA) of 2015;⁵⁵⁷ the Federal Management Financial Integrity Act (FMFIA);⁵⁵⁸ and the Inspector General Act of 1978, as Amended.⁵⁵⁹

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA will continue to provide resource stewardship to ensure that all agency programs operate with fiscal responsibility and management integrity, financial services are efficiently and

Total workyears in FY 2023 include 39.0 FTE to support Central Planning, Budgeting, and Finance working capital fund (WCF) services.

⁵⁵⁵ For more information, please see: https://www.congress.gov/111/plaws/publ352/PLAW-111publ352.pdf.

⁵⁵⁶ For more information, please see: https://www.congress.gov/113/plaws/publ101/PLAW-113publ101.pdf.

⁵⁵⁷ FITARA became law as a part of the National Defense Authorization Act for Fiscal Year 2015 (Title VIII, Subtitle D), https://www.congress.gov/113/plaws/publ291/PLAW-113publ291.pdf.

⁵⁵⁸ For more information, please see: https://www.govinfo.gov/content/pkg/STATUTE-96/pdf/STATUTE-96-Pg814.pdf.

⁵⁵⁹ For more information, please see: https://www.govinfo.gov/content/pkg/STATUTE-92/pdf/STATUTE-92-Pg1101.pdf.

consistently delivered nationwide, and programs demonstrate results. EPA will maintain key planning, budgeting, and financial management activities. EPA will ensure secure and efficient operations and maintenance of core agency financial management systems: Compass, PeoplePlus (Time and Attendance), Budget Formulation System, which includes a Performance Module, and related financial reporting systems. The Agency is reviewing its financial systems for modernization opportunities to support greater efficiencies and effectiveness and targeting legacy systems for replacement. Dashboards are now in place to support payroll and FTE management, and to support GPRMA performance planning and systematic tracking of progress.

In FY 2023, EPA also will continue to standardize and streamline business processes and operations to promote transparency and efficiency. The Program will apply Lean Management techniques and leverage input from customer-focused councils, advisory groups, and technical workgroups to continue improving as a high-performance organization. For example, because of EPA's new Superfund billing process, by the end of FY 2021, 94 percent of all Superfund bills to potentially responsible parties were submitted within 100 days and, on average, it only took 63 days to complete a bill. These improvements will continue, into the future to allow for quicker reimbursement of EPA expenses on Superfund clean-up efforts. Additionally, EPA has implemented Treasury's Invoice Processing Platform (IPP) for reviewing invoices and paying commercial vendors. As of February 2022, roughly 95 percent of contract invoices are being handled through this system. Beginning in FY 2023 EPA will add additional payment types to this system, including Superfund Contract Lab Program payments through a system interface and miscellaneous obligations which will utilize the IPP Self-Service module. This implementation will greatly reduce manual effort, improve data quality, and allow for the elimination of two legacy administrative systems.

Through FY 2022 and FY 2023, EPA will focus on the implementation of G-Invoicing, Treasury's Interagency Agreement system. G-Invoicing will integrate into the Agency's accounting system as part of a government-wide effort to standardize and improve financial management of interagency agreements. The goal of G-Invoicing is to align EPA's business processes to deliver a new and more streamlined approach for the end-to-end delivery of financial transactions for Interagency Agreements. This will involve implementing a new version of EPA's accounting systems software in FY 2022. Extensive testing and training will be needed to implement the associated business process changes and system touchpoints. By the end of FY 2022, the Agency will begin brokering and processing all new Interagency Agreements within G-invoicing. In FY 2023, the Agency will work on ensuring that all open Interagency Agreements are migrated into G-invoicing. The Agency goal is to fully implement G-invoicing for new and existing agreements by the Treasury mandated date of October 1, 2023.

In FY 2023, the Program also will continue to focus on core responsibilities in the areas of strategic planning and budget preparation, financial reporting, transaction processing, and Superfund Cost Recovery. In FY 2022, EPA plans to deploy the eRecovery system for Superfund, Federal Emergency Management Agency, and Oil Spill billing and cost recovery. This new system modernizes and replaces the legacy system and improves functionality and security. In FY 2023, EPA will decommission the legacy cost recovery system, Superfund Cost Recovery Package Imaging and On-line System (SCORPIOS) and deploy a minor release of eRecovery to address any user concerns noted during the FY 2022 implementation. The Program will continue to

implement FITARA requirements in accordance with EPA's Implementation Plan. ⁵⁶⁰ The Chief Information Officer will continue to be engaged throughout the budget planning process to ensure that information technology (IT) needs are properly planned and resourced in accordance with FITARA. In addition, the Program will continue work to implement the OMB-mandated framework under Technology Business Management (TBM) to create transparency under IT resource management and facilitate data-driven decision-making and communication between IT and finance.

EPA will continue to conduct internal control program reviews and use the results and recommendations from the Office of Inspector General to provide evidence of the soundness of EPA's financial management program and identify areas for further improvement. The Agency will collect key operational statistics for its financial management program to further evaluate its operations and for management decision-making. For example, in FY 2019, EPA observed a trend that agency corrective actions were increasingly being implemented beyond the agreed upon resolution date. OCFO continues to engage more and more with the community to ensure the close out or extension requests were completed. Additionally, OCFO is adding in validation and documentation measures to ensure that the process is standardized across the Agency while providing more customer-level support.

EPA has made significant strides in recent years to bring programs that were considered susceptible to improper payments, to a point where the improper payments are at very low rates. However, the Agency continues to be vigilant in its payment reviews. Annually, EPA conducts internal control reviews of multiple programs. In addition, as required by Payment Integrity Information Act of 2019 (PIIA) (P.L. 116-117),⁵⁶¹ and OMB Memorandum M-21-19 Appendix C,⁵⁶² EPA is conducting a triennial risk assessment review of all of its payment streams. Other improvements include the recent implementation of upgraded systems used for payments and invoice processing through which the Agency anticipates even fewer payment errors moving forward. To strengthen our processes, EPA is developing risk assessment plans for any additional funding the Agency receives. These risk assessments will outline any differences in authorities or new requirements of the funding, potential areas that will need additional guidance as well as tracking and reporting, performance measures and internal controls that will be established to prevent and detect possible improper payment activities.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

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⁵⁶⁰ For more information please see: http://www.epa.gov/open/fitara-implementation-plan-and-chief-information-officer-assignment-plan

⁵⁶¹ For more information, please see: https://www.congress.gov/116/plaws/publ117/PLAW-116publ117.pdf.

⁵⁶² For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/03/M-21-19.pdf.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$1,637.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE from annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$608.0 / +0.4 FTE) This program change reflects an increase to allow the Agency to continue its efforts to modernize and streamline its financial systems and processes. This program change also funds the effort to scale up support needed to implement increased workload on grant payments and provide essential workforce support, training and working capital fund needs. This investment includes \$70.0 thousand in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Facilities Infrastructure and Operations

Program Area: Operations and Administration Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$257,524	\$285,441	\$288,293	\$2,852
Science & Technology	\$65,093	\$67,500	\$68,912	\$1,412
Building and Facilities	\$36,071	\$27,076	\$73,894	\$46,818
Leaking Underground Storage Tanks	\$932	\$836	\$724	-\$112
Inland Oil Spill Programs	\$628	\$682	\$641	-\$41
Hazardous Substance Superfund	\$81,976	\$68,727	\$71,219	\$2,492
Total Budget Authority	\$442,223	\$450,262	\$503,683	\$53,421
Total Workyears	334.2	315.4	325.4	10.0

Total workyears in FY 2023 include 5.4 FTE to support Facilities Infrastructure and Operations working capital fund (WCF) services.

Program Project Description:

Superfund resources in the Facilities Infrastructure and Operations Program fund the Agency's rent, utilities, and security. The Program also supports centralized administrative activities and support services, including health and safety, environmental compliance and management, facilities maintenance and operations, space planning, sustainable facilities and energy conservation planning and support, property management, mail, and transportation services. Funding for such services is allocated among the major appropriations for the Agency.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Agency requests an investment of 1.0 FTE and approximately \$2.5 million to support agencywide climate sustainability and resiliency initiatives and EPA facilities projects to ensure the Agency has an optimal footprint. EPA will continue to invest in the reconfiguration of the Agency's workspaces, enabling the Agency to release office space and avoid long-term rent costs, consistent with HR 4465, 563 the *Federal Assets Sale and Transfer Act of 2016*. EPA is implementing a long-term space consolidation plan that aims to reduce the number of occupied facilities, consolidate and optimize space within remaining facilities, and reduce square footage wherever practical. EPA also will continue working to enhance its federal infrastructure and operations in a manner that increases efficiency. For FY 2023 the Agency is requesting \$41.94

⁵⁶³ For additional information, please refer to: https://www.congress.gov/bill/114th-congress/house-bill/4465, Federal Assets Sale and Transfer Act of 2016.

million for rent, \$2.24 million for utilities, and \$8.95 million for security in the Superfund appropriation. EPA uses a standard methodology to ensure that rent charging appropriately reflects planned and enacted resources at the appropriation level.

EPA also will work to secure physical and operational resiliency for agency facilities. As part of this work, EPA will continue conducting climate resiliency assessments at all EPA-owned facilities to identify critical upgrades that are necessary to improve facility resiliency against the impacts of climate change, such as roofing stability or seawall construction projects. In FY 2023, EPA will conduct climate assessments at the following facilities: Cincinnati Test and Evaluation Facility, Duluth Environmental Center, Ada Gaar Corner, Ada Environmental Research Center, and Region 10 Laboratory—Manchester. EPA will initiate all high-priority projects within 24 months of a climate assessment.

Further, EPA will continue reconfiguring EPA's workplaces with the goal of reducing long-term rent costs while increasing EPA facility sustainability to combat the effects of climate change and ensuring a space footprint that accommodates a growing workforce. Space reconfiguration enables EPA to reduce its footprint to create a more efficient, collaborative, and technologically sophisticated workplace. However, even if modifications are kept to a minimum, each move requires initial funding to achieve long-term cost avoidance and sustainability goals. These investments support sustainable federal infrastructure, a clean energy future, and goals to achieve net-zero emissions by 2050.

In FY 2023, EPA will pursue aggressive energy, water, and building infrastructure requirements with emphasis on environmental programs (e.g., Environmental Management Systems, Environmental Compliance Programs, Leadership in Energy and Environmental Design Certification, alternative fuel use, fleet reductions, telematics, sustainability assessments). This investment in infrastructure (e.g., architectural and design) and mechanical systems (e.g., electrical, water/steam, HVAC) is necessary to meet the Administration's climate sustainability goals. Additionally, in 2023, EPA will continue to transition to electric vehicles through direct purchase (mobile lab vehicles) or lease through the General Services Administration (GSA) for all future fleet procurements where economically feasible. EPA also will identify opportunities to build out necessary charging infrastructure at EPA facility locations. EPA's goal is to use 100 percent carbon pollution-free electricity on a net annual basis by 2030.

EPA also will meet regulatory Occupational Safety and Health Administration (OSHA) obligations and provide health and safety training to field staff (e.g., inspections, monitoring, on-scene coordinators), and track capital equipment of \$25 thousand or more. The Agency will continue its partnership with GSA to utilize shared services solutions, *USAccess* and Enterprise Physical Access Control System (ePACS) programs. *USAccess* provides standardized HSPD-12 approved Personal Identity Verification (PIV) card enrollment and issuance and ePACS provides centralized access control of EPA space, including restricted and secure areas.

Performance Measure Targets:

(PM CRP) Percentage of priority climate resiliency projects for EPA-owned	FY 2022 Target	FY 2023 Target
facilities initiated within 24 months of a completed facility climate assessment and project prioritization.		100

(PM CAA) Number of EPA-owned facility climate adaptation assessments	FY 2022	FY 2023
· · · · · · · · · · · · · · · · · · ·	Target	Target
completed.	2	5

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$213.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,279.0 / +1.0 FTE) This program change is an increase to support EPA facilities projects that will ensure EPA has optimal footprint to support the proposed FTE increase in the FY 2023 Budget request and agencywide climate sustainability and resiliency initiatives. It is offset by a net decrease from the recalculation of rent, utilities, and security, and transit subsidy costs needs. This investment includes \$175.0 thousand in payroll.

Statutory Authority:

Federal Property and Administration Services Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute). at Title 5, App.) (EPA's organic statute).

Financial Assistance Grants / IAG Management

Program Area: Operations and Administration Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$27,294	\$25,430	\$33,040	\$7,610
Hazardous Substance Superfund	\$4,224	\$3,210	\$4,403	\$1,193
Total Budget Authority	\$31,518	\$28,640	\$37,443	\$8,803
Total Workyears	137.0	139.5	184.5	45.0

Program Project Description:

Superfund resources in the Financial Assistance Grants and Interagency Agreement (IA) Management Program support the management of grants and IAs as well as suspension and debarment activities for assistance and procurement programs. Grants and IAs historically comprise approximately 60 percent of EPA's annual appropriations. Resources in this program ensure that EPA manages grants and IAs to meet the highest fiduciary standards and achieve measurable results for environmental programs and agency priorities, and that the government's financial resources and business interests are protected from fraud and mismanagement. These objectives are critically important for the Superfund program, as a substantial portion of the Program is implemented through IAs with the U.S. Army Corps of Engineers and the U.S. Coast Guard.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA requests an additional investment of \$1.19 million and 5.0 FTE to provide technical assistance and outreach to first time recipients of federal funding; improve capacity for oversight and tracking of new and increased grant investments; and process financial assistance agreements in a timely manner. EPA will continue to implement grants management activities to achieve efficiencies while enhancing quality and accountability and ensuring that opportunities for competitive grants are made publicly available so that all eligible applicants have an opportunity to compete for them. EPA also will explore methods to use or update the grant competition and grant-making processes to promote racial equity and support for underserved communities. For example, EPA will provide technical assistance to potential grantees from underserved communities on sound financial management practices to reduce barriers to competition for EPA grant resources. EPA also will track grant place of performance to determine whether underserved and environmental justice (EJ) communities are realizing the benefits of EPA grant programs.

EPA will continue investments in modernizing grant and IA information technology/information management (IT/IM) systems, support the improved capacity for oversight and tracking of new and increased grant investments, and ensure the timely processing of financial assistance agreements. EPA will manage its Next Generation Grants System (NGGS) in conjunction with the retirement of an outdated legacy grants management system. NGGS aligns with the requirements of the Grant Reporting Efficiency and Agreements Transparency Act, applicable Office of Management and Budget (OMB) Quality Service Management Offices (QSMO) standards, and the Federal Integrated Business Framework for grants (e.g., required standard data elements for grants reporting). In FY 2023, EPA will operate and maintain an electronic grants records management system that integrates with EPA's enterprise records management system and aligns with applicable QSMO standards. The Agency also will utilize the government-wide Unique Entity Identifier system for grant awards to meet OMB requirements.

Further, EPA will continue to focus on reducing the administrative burden on EPA and grant applicants and recipients, and on improving grants management procedures. The Agency will continue implementing the FY 2021-2025 Grants Management Plan, focusing on the award and effective management of assistance agreements, enhancing partnerships within the grants management community, promoting environmental justice, and ensuring effective grant oversight and accountability.

By October 1, 2022, EPA will have completed activities to align its IA business processes to ensure compatibility with the government-wide mandate to adopt G-Invoicing, the federal shared service for intragovernmental transactions. EPA provides quarterly progress updates to Treasury that highlight activities under the Agency's approved G-Invoicing Implementation Plan.

In FY 2023, the Agency will continue to make use of discretionary debarments and suspensions as well as statutory disqualifications under the Clean Air Act and Clean Water Act to protect the integrity of federal assistance and procurement programs. Congress and federal courts have long recognized federal agencies' inherent authority and obligation to exclude non-responsible parties from eligibility to receive government contracts and federal assistance awards (e.g., grants, cooperative agreements, loans, and loan guarantees).

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$240.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$953.0 / +5.0 FTE) This program change will support technical assistance and outreach to first time recipients of federal funding; improve capacity for oversight and tracking of

new and increased grant investments; and the timely processing of financial assistance agreements. This investment includes \$889.0 thousand in payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Federal Grant and Cooperative Agreement Act; Federal Acquisition Streamlining Act § 2455.

Human Resources Management

Program Area: Operations and Administration Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$48,256	\$46,229	\$66,087	\$19,858
Hazardous Substance Superfund	\$7,200	\$6,202	\$8,476	\$2,274
Total Budget Authority	\$55,456	\$52,431	\$74,563	\$22,132
Total Workyears	228.3	229.9	316.4	86.5

Total workyears in FY 2023 include 0.2 FTE to support Human Resources Management working capital fund (WCF) services.

Program Project Description:

Superfund resources for the Human Resources (HR) Management Program support human capital management (HCM) activities throughout EPA. To help achieve its mission and maximize employee productivity and job satisfaction, EPA continually works to improve business processes for critical HCM functions including recruitment, hiring, employee development, performance management, leadership development, workforce planning, and labor union engagement. This includes personnel and payroll processing through the Human Resources Line of Business. These resources also support overall federal advisory committee management and Chief Human Capital Officer Council activities under applicable statutes and guidance, including the Agency's Human Capital Operating Plan.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Agency requests an additional investment of \$2.27 million and 12.8 FTE to support the implementation of EPA's Diversity, Equity, Inclusion, and Accessibility (DEIA) Strategic Plan, expand EPA's intern program, support EPA's Learning Agenda's evidence-gathering activities, and strengthen agencywide capacity to quickly increase staff levels in key offices and programs. Effective workforce management is critical to EPA's ability to accomplish its mission. EPA's efforts in HR functions are focused on strengthening the workforce, retaining critical expertise, and capturing institutional knowledge. EPA continues developing mechanisms to ensure employees have the right skills to successfully achieve the Agency's core mission today and in the future.

The Agency is actively involved with OPM's Chief Human Capital Officer Council and the President's Management Council Agenda to address the challenges of the 21st Century federal workforce. In FY 2023, EPA will implement the actions identified in the DEIA Strategic Plan to

assess whether agency recruitment, hiring, promotion, retention, professional development, performance evaluations, pay and compensation policies, reasonable accommodations access, and training policies and practices are equitable. EPA will take an evidence-based and data-driven approach to determine whether and to what extent agency practices result in inequitable employment outcomes, and whether agency actions may help to overcome systemic societal and organizational barriers. Further, the Agency will assess the status and effects of existing diversity, equity, inclusion, and accessibility initiatives or programs, and review the institutional resources available to support human resources activities. For areas where evidence is lacking, the Agency will propose opportunities to advance diversity, equity, inclusion, and accessibility, addressing those gaps. EPA will continue to involve employees at all levels of the organization in the assessment of DEIA initiatives and programs.

In FY 2023, EPA will support the following DEIA initiatives:

- EPA will plan a Senior Executive Service Candidate Development Program, projected to start in early FY 2024. The Program will focus on diversity, equity, inclusion, and accessibility so future executives reflect the diversity of the American people and are effectively trained in the skills necessary to lead a diverse workforce that operates in a hybrid work environment.
- EPA will develop and implement a centralized paid internship program which expands on existing internship opportunities across the Agency to strengthen talent and workforce acquisition. This paid internship program will focus on expanding federal work experience opportunities for underrepresented and underserved populations, , which may experience barriers to applying or fully participating in existing opportunities. EPA will provide approximately 180 four-month internship opportunities in every EPA Headquarters and Regional Office. Additionally, EPA will establish a plan to convert eligible interns to permanent federal service based on performance and completing program requirements.

EPA has increased efforts to improve Diversity and Inclusion, hosting virtual outreach events targeting diverse networks such as veterans, Historically Black Colleges and Universities, and Returned Peace Corps Volunteers. To recruit EPA's next generation of employees, EPA will continue outreach to new potential sources for future employees and use all available hiring authorities, including Schedule A, and recruitment incentives. In FY 2023, EPA will continue to work with Science, Technology, Engineering and Mathematics-focused institutions and organizations, like the Society of Hispanic Professional Engineers, and will participate in the President Management Council's Interagency Rotational Program to create leadership development assignments for GS 13-15 level employees. EPA reviews applicant flow data analysis on diversity every quarter to assess progress and identify areas for improvement.

In FY 2023, EPA will continue to implement flexible work policies in line with OMB Memoranda M-21-25 - Integrating Planning for A Safe Increased Return of Federal Employees and Contractors to Physical Workplaces with Post-Reentry Personnel Policies and Work Environment, ⁵⁶⁴ including designation of remote work status to certain positions, providing work schedule flexibilities, and increasing the use of telework. EPA will strive to be a model federal

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⁵⁶⁴ For additional information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/06/M-21-25.pdf.

employer, and these efforts will strengthen the Agency's ability to attract, recruit, retain, and empower top talent while advancing diversity, equity, inclusion, and accessibility.

EPA will identify the most critical need for climate literacy training for its workforce. These efforts will focus on integrating climate adaptation, risk disclosure, and other education activities into the management of EPA's procurement, real property, public lands and waters, and financial programs.

EPA also will continue supporting evidence-building activities to implement a workforce strategy guided by data-driven decisions as part of its implementation of the Evidence Act through the Workforce Planning learning priority area in EPA's Learning Agenda. This work includes determining Mission Critical Competencies, enhancement of EPA's competency assessment tool, skills gap analysis across the Agency, and knowledge transfer strategies to support succession planning.

In FY 2023, EPA will continue to operate and maintain the Talent Enterprise Diagnostic (TED) tool to allow EPA to make data-driven, strategic workforce decisions. TED data will serve a crucial role in EPA's Workforce Planning and Succession Management activities by identifying potential competency gaps across the Agency and by increasing management's understanding of where needed skill sets should reside within EPA. Additionally, EPA will continue to maintain and operate dashboards related to Mission Critical Occupations, Workforce Demographics, and Diversity. These dashboards provide data visualizations and easy-to-understand information about the current workforce, assisting EPA with succession planning by identifying workforce gaps due to anticipated retirements and attrition trends, which is critical considering that approximately 25 percent of EPA's workforce is retirement eligible, and another 19 percent of the current workforce will become retirement eligible over the next five years.

The Agency will continue to implement Executive Order 14003, *Protecting the Federal Workforce*, ⁵⁶⁵ issued on January 22, 2021. EPA reviewed its Unions' agreements to identify and eliminate provisions influenced by four revoked executive orders and will increase the focus on pre-decisional involvement and interest-based bargaining. In FY 2023, EPA will continue working to reset and repair relationships and involve unions in a collaborative way, promoting the Agency's and the unions' shared goal of the positive and equitable treatment of newly empowered employees.

Finally, EPA's advisory committees, operating as catalysts for public participation in policy development, implementation, and decision making, have proven effective in building consensus among the Agency's diverse external partners and stakeholders. In line with President Biden's *Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking*, ⁵⁶⁶ EPA remains committed to ensuring that highly qualified external experts serve on agency committees and that those members and future nominees of EPA advisory committees

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 ⁵⁶⁵ For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/22/executive-order-protecting-the-federal-workforce/.
 566 For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-

⁵⁶⁶ For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/memorandum-on-restoring-trust-in-government-through-scientific-integrity-and-evidence-based-policymaking/.

reflect the diversity of America in terms of gender, race, ethnicity, geography, and other characteristics.

Performance Measure Targets:

Work under this program supports performance results in the Human Resources Management Program under the EPM appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$685.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$948.0 / +12.0 FTE) This program change is an increase to develop and implement a centralized paid internship program to strengthen talent and workforce acquisition. This paid internship program will focus on expanding Federal work experience opportunities for underrepresented and underserved populations. This investment includes \$840.0 thousand in payroll.
- (+\$360.0) This program change is an increase to support the establishment of a Senior Executive Service Candidate Development Program with a goal that EPA senior leaders reflect the diversity of the American people and will include a special focus on developing diversity, equity, accessibility, and inclusivity competencies.
- (+\$281.0 / +0.8 FTE) This program change is an increase in support of the Foundations for Evidence-Based Policymaking Act of 2018. Resources will be used for Learning Agenda's evidence-gathering activities. This investment includes \$137.0 thousand in payroll.

Statutory Authority:

Title 5 of the U.S.C.; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Research: Chemical Safety and Sustainability

Health and Environmental Risk Assessment

Program Area: Research: Chemical Safety for Sustainability Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Science & Technology	\$35,251	\$37,482	\$42,355	\$4,873
Hazardous Substance Superfund	\$3,654	\$12,824	\$4,896	-\$7,928
Total Budget Authority	\$38,905	\$50,306	\$47,251	-\$3,055
Total Workyears	163.3	154.9	174.9	20.0

Program Project Description:

EPA's Health and Environmental Risk Assessment (HERA) Program is focused on the science and practice of assessments that inform decisions made by EPA and others, including states and tribes. These assessments provide the scientific basis for decisions under an array of environmental laws including the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). HERA supports the risk assessment needs of the Agency's Superfund Program and regional risk assessors. With funding from Superfund, the HERA Research Program provides Provisional Peer-Reviewed Toxicity Values (PPRTVs) and other 'fit-for-purpose' assessments to respond to emergent scenarios, and technical support on the application of human health and ecological risk assessment practices at hazardous waste sites for Superfund. These assessment tools and activities support risk-based management decisions at contaminated Superfund and hazardous waste sites.

The HERA Research Program supports the Agency's mission to protect human health and the environment by identifying and characterizing the health hazards of chemicals of concern to the Superfund Program and responding to technical requests on topics relevant to human health or ecological risk assessment at hazardous waste sites. Scientists in the HERA Research Program synthesize available scientific information on the potential health and environmental impacts of exposures to individual chemicals and chemical mixtures in the environment, such as per- and polyfluoroalkyl substances (PFAS). PPRTVs and other HERA assessments are an important source of toxicity information and toxicity values to ensure improvements in human health and the environment in communities near Superfund sites.

Priorities for PPRTV development are based on the needs of the Agency's Land and Emergency Management Program, with input from Agency regional offices, and are evaluated annually. HERA research areas include applying new data streams; read-across approaches and computational tools; enhancement of supporting data/knowledge bases; and efficiency of derivation for PPRTV values.

There are over 1,300 Superfund sites on the National Priorities List. 567 Communities near Superfund sites or in emergency situations are faced with an urgent need for coordinated assistance to assess and address issues of environmental contamination. The HERA Research Program anticipates environmental contamination issues and develops new assessment approaches to enhance rapid response and screening capabilities and to augment toxicity value derivation procedures for health assessments.

Recent Accomplishments of the HERA Research Program include:

The HERA Research Program has been developing assessment products to inform science-based decision-making, enhance timely responses, improve screening capabilities, and augment toxicity value derivations for use in risk assessments.

- **Portfolio of Chemical Assessments:** In FY 2021, nine PPRTV assessments were finalized, and HERA anticipates delivering at least nine additional high-priority PPRTV assessments in FY 2022⁵⁶⁸ based on the needs and priorities of EPA's Superfund Program. HERA also supports the needs of EPA's Land and Emergency Management Program through the development of other assessment products of priority chemicals, such as PFAS, polychlorinated biphenyls, methylmercury, hexavalent chromium, and inorganic arsenic. 569
- Advancements in Lead Modeling: In FY 2021, HERA, in coordination with EPA's Land and Emergency Management Program, released updates to the Integrated Exposure Uptake Biokinetic (IEUBK) model to support lead biokinetic modeling in children. HERA anticipates finalizing updates to the All-Ages Lead Model (AALM) in the fall of 2022 which will include improved lead biokinetic modeling in adults and children.
- Technical Support: HERA responds to ongoing requests for scientific support on human and ecological assessment via the Superfund Health Risk Technical Support Center⁵⁷⁰ and Ecological Risk Assessment Support Center.⁵⁷¹ Recent efforts have included providing risk assessment support at Plattsburg Air Force Base (Vermont), Velsicol Chemical Corp (Michigan), Tittabawassee River (Michigan), LA. Clarke & Son (Virginia), and ASARCO Superfund Site (Nebraska). Ongoing requests include assistance with employing new approach methods, review of probabilistic risk assessment models, and continued stakeholder engagement on complex science to address needs of Superfund sites across the United States. Additionally, issue papers on nominated topics of interest have also been developed to support risk assessment activities including, "Allometric Scaling of Terrestrial Wildlife Oral Toxicity Measurements and Comparison of Ecological to Human Health Assessment Contexts" A Critical Review of Geochemical Evaluations and Proposal of Alternative Methodology." States

⁵⁶⁹ For more information, please see: https://www.epa.gov/iris/iris-recent-additions.

⁵⁶⁷ For more information, please see: https://www.epa.gov/superfund/superfund-national-priorities-list-npl.

⁵⁶⁸ For more information, please see: https://www.epa.gov/pprtv

⁵⁷⁰ For more information, please see: https://www.epa.gov/land-research/superfund-health-risk-technical-support-center-stsc

⁵⁷¹ For more information, please see: https://www.epa.gov/land-research/epas-technical-support-centers.

⁵⁷² For more information, please see: https://cfpub.epa.gov/ncea/erasc/recordisplay.cfm?deid=353936

⁵⁷³ For more information, please see: https://cfpub.epa.gov/ncea/erasc/recordisplay.cfm?deid=347774

FY 2023 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022-2026 EPA Strategic Plan.

In FY 2023, the HERA Research Program's work will focus explicitly on efforts integral to achieving the Agency's priorities and informing EPA's implementation of key environmental regulations. Examples of this work include:

- **PFAS Research:** Per- and polyfluoroalkyl substances (PFAS) are a class of chemicals of concern in the environment, and EPA is committed to pursuing all options to address PFAS pollution and protect human health and the environment. Decision-making on PFAS chemicals is hindered by a limited number of standard toxicity values. There are still large numbers of PFAS, of high interest to partners, that currently have no federal published, peer-reviewed toxicity values. As described in the PFAS Strategic Roadmap, 574 within the HERA Research Program, EPA is prioritizing additional PFAS for development of peer-reviewed toxicity values. This will result in an expanded set of high-quality peer-reviewed toxicity values for use by federal, state, and tribal decision makers in making risk assessment and management decisions.
- **PPRTV Assessments**: In FY 2023, the HERA Program will provide at least nine additional PPRTV assessments as prioritized by EPA's Land and Emergency Management Program.
- **Portfolio of Assessment Products:** In FY 2023, the HERA Program will complement the PPRTVs by providing additional 'fit-for-purpose' assessment products for priority chemicals, such as for up to six perfluorinated compounds as prioritized by the Land and Emergency Management Program. Having modernized its assessment infrastructure, HERA will use evidence mapping to provide a better understanding of the extent and nature of evidence available to address Agency needs (i.e., 'fit for purpose'). This approach is expected to improve throughput for PPRTV development.
- Linking Databases and Management Tools: In FY 2023, the HERA Program will continue to collaborate with the Chemical Safety for Sustainability (CSS) Research Program to link the architecture of HERA's assessment databases and literature management tools, including *Health and Environmental Research Online*⁵⁷⁵ and the *Health Assessment and Workplace Collaborative*⁵⁷⁶ with the *CompTox Chemicals Dashboard*⁵⁷⁷ being developed in CSS.
- **Rapid Technical Support:** In FY 2023, the HERA Program will continue essential technical assistance across EPA to provide rapid technical support to programs and regions. These activities will provide expedited technical support for evaluating chemical-specific

⁵⁷⁴ For more information, please see EPA's PFAS Strategic Roadmap at: https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap final-508.pdf

⁵⁷⁵ For more information, please see: https://hero.epa.gov/hero/.

⁵⁷⁶ For more information, please see: https://hawcprd.epa.gov/.

⁵⁷⁷ For more information, please see: https://comptox.epa.gov/dashboard.

exposures at Superfund and contaminated sites, as well as incorporating case-specific information related to urgent situations.

• Lead: Childhood lead exposure continues to be one of the highest priorities for EPA. To advance the application of lead exposure and biokinetic models in EPA regulatory decisions and site assessments, HERA research will enhance, evaluate, and apply lead biokinetic models for estimating potential blood lead levels for regulatory determinations. Additionally, the Exposure Factors Handbook provides up-to-date data on various human factors, including soil and dust ingestion rates, used by risk assessors.

Research Planning:

EPA is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is planned with their active involvement. Each research program is in the process of developing the fourth generation of the StRAPs, which will continue the practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

The Office of Research and Development (ORD) works with various groups, including communities, to ensure the integrity and value of its research through a variety of mechanisms that include:

- EPA's Board of Scientific Counselors (BOSC)
 - ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.
- State Engagement
 - o EPA's state engagement⁵⁸⁰ is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies.
- Tribal Partnerships
 - O Key tribal partnerships are established through the Tribal Science Program which provides a forum for the interaction between tribal and Agency representatives. These interactions identify research of mutual benefit and lead to collaborations on important tribal environmental science issues.

Performance Measure Targets:

⁵⁷⁸ For more information, please see: https://www.epa.gov/superfund/lead-superfund-sites-software-and-users-manuals.

⁵⁷⁹ For more information, please see: https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236252.

⁵⁸⁰ For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

Work under this program supports performance results in the Research: Chemical Safety for Sustainability Program under the S&T appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$108.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$24.0) This program change is an increase to funding for research related to identifying and characterizing the health hazards of chemicals of concern to the Superfund Program.
- (-\$8,060.0) This program change reallocates resources within the Superfund appropriation from the Human and Environmental Risk Assessment (HERA) program to the Chemical Safety and Sustainability (CSS) program to continue support for PFAS research not focused on the science of assessments. There is no programmatic impact associated with this change.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Research: Chemical Safety for Sustainability

Program Area: Research: Chemical Safety for Sustainability Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$115	\$0	\$0	\$0
Science & Technology	\$75,966	\$89,518	\$98,093	\$8,575
Hazardous Substance Superfund	\$6,065	\$0	\$8,060	\$8,060
Total Budget Authority	\$82,146	\$89,518	\$106,153	\$16,635
Total Workyears	278.1	273.9	300.9	27.0

Program Project Description:

EPA's Chemical Safety for Sustainability (CSS) Research Program provides scientific and technical approaches, information, tools, and methods to support the Agency and others to make better-informed, more-timely decisions about chemicals and their potential risks to human health and the environment. S81 CSS products strengthen the Agency's ability to use the best available science to evaluate and predict human health and ecological impacts from the use, reuse, recycling, and disposal of manufactured and naturally occurring chemicals and their by-products.

CSS research informs Agency decisions about chemicals, accelerates the pace of chemical assessment and decision-making, and helps to replace, reduce, and refine the use of mammals used to evaluate chemical risk to ecological and human health. CSS products inform Agency programs as they implement environmental regulations that govern Agency actions, including the evaluation of existing and new chemicals (Toxic Substances Control Act [TSCA]), development and use of alternative testing protocols (TSCA, Federal Insecticide Fungicide and Rodenticide Act [FIFRA], Food Quality Protection Act [FQPA], Federal Food Drug Cosmetics Act [FFDCA]), chemical prioritization (TSCA, Safe Drinking Water Act [SDWA]), evaluation of pesticide registrations (FIFRA, Endangered Species Act), and mitigation activity at Superfund sites (Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA]). CSS research activities are coordinated with the activities of other national research programs to inform high priority research topics, such as research focused on per- and polyfluoroalkyl substances (PFAS). Coordination with the Health and Environmental Risk Assessment (HERA) Program ensures that the approaches, tools, and information produced by CSS can be used to improve chemical risk assessments, reduce uncertainties associated with those assessments, and increase the speed of delivering chemical information to the Agency.

⁵⁸¹ For the CSS StRAP, please see: https://www.epa.gov/research/chemical-safety-sustainability-strategic-research-action-plan-2019-2022.

FY 2023 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022-2026 EPA Strategic Plan.

In FY 2023, CSS research will continue to provide information needed to inform Agency decisions about chemicals, with a special emphasis on PFAS. PFAS are a large class of fluorinated substances of growing concern and EPA is committed to supporting tribes, states, and local communities to understand and manage risks associated with these chemicals. SEZ CSS research on PFAS represents a major integrative effort that will provide systematic information on a broad range of topics. CSS scientists will continue to identify, curate, evaluate, and extract available physicochemical, structural, exposure, and toxicological data from the published and gray literature to inform study design, categorization approaches, and interpretation of emerging studies.

PFAS chemicals will be acquired to expand the existing PFAS physical library of compounds to include those PFAS of interest to Agency and external partners. Relevant PFAS data will be incorporated into the CompTox Chemicals Dashboard. PFAS fate, transport, occurrence, and persistence in the environment and in consumer products will be evaluated to help understand exposure scenarios. In addition, a tiered toxicity testing strategy will be executed which utilizes new approach methods (NAMs) to evaluate single PFAS chemicals and mixtures in a high throughput manner, followed by targeted *in vivo* testing for chemicals identified as priorities. This testing approach will include several systems-specific toxicity tests, including developmental neurotoxicity, thyroid toxicity, immunotoxicity, and developmental and reproductive toxicity. Various types of modeling will be used to translate *in vitro* results into *in vivo* outcomes and will include the use of adverse outcome pathway (AOP) models that link *in vitro* results to outcomes relevant to regulatory objectives and *in silico* predictive toxicity models.

In the ecological domain, CSS is developing multispecies approaches to evaluate species sensitivity differences across taxa to inform aquatic risk benchmarks. Furthermore, work continues to determine the bioaccumulation of PFAS in aquatic species which also is relevant to human health in the context of exposure via fish consumption. This work is being done in collaboration with the National Institute of Environmental Health Sciences: National Toxicology Program. Resources requested in FY 2023 will build upon the research foundation formed from completed work outlined in the *PFAS Strategic Roadmap*. ⁵⁸⁴

Research Planning:

EPA's Office of Research and Development (ORD) is built around six integrated and transdisciplinary research programs. CSS research addresses real-world problems, informs Agency implementation of environmental regulations, and helps EPA and its stakeholders make timely decisions based on the best available science. Each of the six integrated and

⁵⁸² For more information, please see: https://www.epa.gov/pfas/pfas-community-engagement.

⁵⁸³ For more information, please see: https://comptox.epa.gov/dashboard.

⁵⁸⁴ For more information, please see: https://www.epa.gov/pfas/pfas-strategic-roadmap-epas-commitments-action-2021-2024

transdisciplinary research programs is guided by a Strategic Research Action Plan (StRAP)⁵⁸⁵ that reflects the research needs of Agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement. The CSS FY 2019-2022 StRAP builds upon the science foundation for chemical evaluations built by research in prior years and continues a practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders. ORD is in the beginning stages of developing the fourth iteration of the StRAPs, which will cover FY 2023-2026.

ORD works with various groups, including communities, to ensure the integrity and value of its research through a variety of mechanisms that include:

- EPA's Board of Scientific Counselors (BOSC)
 - ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.
- State Engagement
 - EPA's state engagement⁵⁸⁶ is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies.
- Tribal Partnerships
 - Key tribal partnerships are established through the Tribal Science Program which
 provides a forum for the interaction between tribal and Agency representatives of
 mutual benefit and responsibility to work collaboratively on environmental science
 issues.

Performance Measure Targets:

Work under this program supports performance results in the Research: Chemical Safety for Sustainability Program under the S&T appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$8,060.0) This program change reallocates resources within the Superfund appropriation from the Human and Environmental Risk Assessment (HERA) program to the Chemical Safety and Sustainability (CSS) program to continue PFAS research. There is no programmatic impact associated with this change.

Statutory Authority:

Clean Air Act §§ 103, 104; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Children's Health Act; 21st Century Nanotechnology Research and Development Act; Clean Water Act; Federal Food, Drug, and Cosmetic Act (FFDCA); Federal Insecticide,

⁵⁸⁵ For all ORD StRAPs, please see: https://www.epa.gov/research/strategic-research-action-plans-2019-2022

⁵⁸⁶ For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

Fungicide and Rodenticide Act (FIFRA); Pollution Prevention Act (PPA); Resource Conservation and Recovery Act (RCRA); Safe Drinking Water Act (SDWA); Toxic Substances Control Act (TSCA).

Research: Sustainable Communities

Research: Sustainable and Healthy Communities

Program Area: Research: Sustainable Communities Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Science & Technology	\$112,717	\$133,000	\$141,477	\$8,477
Leaking Underground Storage Tanks	\$303	\$320	\$337	\$17
Inland Oil Spill Programs	\$1,149	\$664	\$674	\$10
Hazardous Substance Superfund	\$13,458	\$16,463	\$16,927	\$464
Total Budget Authority	\$127,626	\$150,447	\$159,415	\$8,968
Total Workyears	442.3	421.8	441.8	20.0

Program Project Description:

This area of EPA's Sustainable and Healthy Communities (SHC) Research Program responds directly to the Superfund law requirements for a comprehensive and coordinated federal "program of research, evaluation, testing, development, and demonstration of alternative or innovative treatment technologies...which may be utilized in response actions to achieve more permanent protection of human health and welfare and the environment." ⁵⁸⁷

SHC has made a commitment to foster environmental, public health, and economic benefits for overburdened communities. Superfund remedial technologies will directly support communities with environmental justice concerns and accelerate solutions to ameliorate the negative impacts Superfund sites pose for underserved communities. SHC also will emphasize remediation technologies that improve long-term site resilience including to the impacts and potential future impacts of climate change (e.g., flooding, fire, sea level rise). SHC will apply an integrated systems approach to incorporate diverse data streams for increased understanding of linkages between the total environment (built, natural and social) and public health to support communities and will highlight climate change and environmental justice related research throughout the program.

SHC's research under the Superfund appropriation provides federal, regional, and community decision-makers with 1) engineering tools, methods, and information to assess current conditions at Superfund sites; 2) decision support tools to evaluate the implications of alternative remediation approaches and technologies, and reuse of sites; 3) the latest science to support policy development and implementation; and 4) rapid access to technical support through EPA's Superfund Technical Support Centers.

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⁵⁸⁷ 42 U.S.C. § 9660(b).

Recent Accomplishments of the SHC Research Program include:

- Application of Passive Sampling for Making Management Decisions based on Contaminant Bioavailability at Contaminated Sediment Superfund Sites (Published in March 2021): 588 This research was performed to evaluate the use of passive sampling to assess the risk associated with petroleum hydrocarbon-contaminated sediments and provide data for remediation decisions. The study investigated polycyclic aromatic hydrocarbons (PAHs) in Saint Jones River soils next to the Dover Gas Light Superfund site. The freely dissolved concentrations of total PAHs were estimated based on equilibrium partitioning and the passive sampling findings. Freely dissolved concentrations of PAHs showed greater toxicity with deeper sediments. Results indicated that natural clean sediments can be used to bury less contaminated sites whereas other techniques such as dredging could be focused on highly contaminated areas. This research provides an evidence base for remedial project managers to use in site clean-up decisions.
- Strategies for Managing Risk due to Back Diffusion (Publication Date: Winter 2021 Edition): 589 This review provides a state-of-the-science resource to evaluate treatment options at sites where back diffusion has been identified as a significant factor. Back diffusion is backwards movement of contaminants into areas of relatively higher permeability that makes cleanup more challenging unless it is addressed in the remedial design. This research effort reviewed characteristics of sites with contaminant plume persistence due to back diffusion, and remedial strategies used to manage the issue. Remedial project managers can use the reported research results as a resource during the initial process of screening remedial technologies and strategies to help select those that hold the most promise and warrant further evaluation for application at a given site.

FY 2023 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022-2026 EPA Strategic Plan*.

In FY 2023, EPA research under SHC will support the Land and Emergency Management Program, regional offices, tribes, and states, by providing technical assistance and support to help characterize, remediate, and manage contaminated sites and groundwater—issues which are especially concerning to vulnerable, overburdened communities. The tools developed under the SHC Research Program will help the Agency address complex contamination problems, which may be made more complex by the impacts of climate change, at Superfund, Resource Conservation Recovery Act (RCRA), and Brownfields sites in the United States. EPA research personnel and associated support staff also will collect data to model vapor intrusion in multicompartment and large buildings, as well as sample and analyze contaminated groundwater and sediments at high priority sites (e.g., mining influenced waters). Scientific journal articles, datasets, models, and tools will be published to disseminate findings associated with the data.

⁵⁸⁸ For more information, please see: https://setac.onlinelibrary.wiley.com/doi/abs/10.1002/ieam.4409?af=R.

⁵⁸⁹ For more information, please see: https://ngwa.onlinelibrary.wiley.com/doi/epdf/10.1111/gwmr.12423.

Per- and polyfluoroalkyl substances (PFAS) will continue to be a priority research topic for SHC. SHC is specifically researching analytical methods, human exposure, contaminated sites source zones, hard to treat streams such as landfill leachate, fate and transport of PFAS in groundwater, remediation performance (treatability and cost models), immobilization/stabilization of PFAS, and novel remedial technologies. This work provides technical support and assistance to states, tribes, and local communities on issues pertaining to ecological and human health risk assessment and site engineering challenges related to PFAS.

Research Planning:

EPA research is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is planned with their active involvement. Each research program is in the process of developing the fourth generation of the StRAPs, which will continue the practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its partners.

The Office of Research and Development (ORD) works with various groups, including communities, to ensure the integrity and value of its research through a variety of mechanisms that include:

- EPA's Board of Scientific Counselors (BOSC)
 - ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.
- State Engagement
 - o EPA's state engagement⁵⁹⁰ is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies.
- Tribal Partnerships
 - Key tribal partnerships are established through the Tribal Science Program which
 provides a forum for the interaction between tribal and Agency representatives.
 These interactions identify research of mutual benefit and lead to collaborations on
 important tribal environmental science issues.

Performance Measure Targets:

Work under this program supports performance results in the Research: Sustainable and Healthy Communities Program under the S&T appropriation.

⁵⁹⁰ For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$356.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$7.0) This change to fixed and other costs is an increase due to the recalculation of laboratory fixed costs.
- (+\$101.0) This increase to SHC's Superfund Research Program will build capacity to help respond directly to the Superfund law requirements.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5 App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Superfund Cleanup

Superfund: Emergency Response and Removal

Program Area: Superfund Cleanup Goal: Safeguard and Revitalize Communities Objective(s): Clean Up and Restore Land for Productive Uses and Healthy Communities

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Hazardous Substance Superfund	\$233,104	\$190,000	\$199,835	\$9,835
Total Budget Authority	\$233,104	\$190,000	\$199,835	\$9,835
Total Workyears	268.0	244.7	250.7	6.0

Program Project Description:

The Emergency Response and Removal Program (Superfund Removal) is the foundation of federal emergency response to releases of hazardous substances, pollutants, or contaminants and is essential to managing the associated risks. In the case of a national emergency, EPA is charged with preventing, limiting, mitigating, or containing chemical, oil, radiological, biological, or hazardous materials released during and in the aftermath of an incident. Situations requiring emergency response and removal actions vary greatly in size, nature, and location, and include chemical releases, fires or explosions, natural disasters, and other threats to people from exposure to hazardous substances. EPA's 24-hour-a-day response capability is a cornerstone element of the National Contingency Plan. 591 Further, this program is responsible for the Agency's only Primary Mission Essential Function. Superfund Removal cleanups vary in complexity and contain a wide variety of contaminants including mercury, lead, and asbestos. 592

Over the last ten fiscal years (2012-2021), EPA completed or oversaw more than 2,653 Superfund removal actions across the country. Superfund Removal sites can be found in remote rural areas as well as large urban settings. Approximately 41 million people, or about 13 percent of the population, live within 3 miles of a Superfund Removal site where EPA completed a removal action between FY 2016 and FY 2020. 593 In addition, over 41 percent of removal completions in FY 2019 and FY 2020 were in communities with populations over the 80th percentile for being people of color, low income, or having less than a high school education. 594

The Superfund Removal Program provides technical assistance and outreach to industry, states, tribes, and local communities as part of the Agency's effort to ensure national safety and security for chemical and oil responses. EPA trains, equips, and deploys resources to manage, contain, and remove contaminants. These substances, until contained or removed, have the potential to significantly damage property, endanger public health, and have critical environmental impact on

⁵⁹¹ For more information, please refer to: https://www.epa.gov/emergency-response/national-oil-and-hazardous-substancespollution-contingency-plan-ncp-overview.

592 Data from US EPA Superfund Enterprise Management System.

⁵⁹³ U.S. EPA, Office of Land and Emergency Management 2021. Data collected includes: (1) Superfund removal site information from SEMS from FY2016-FY2020; and (2) population data from the 2015-2019 American Community Survey.

⁵⁹⁴ Data from US EPA Superfund Enterprise Management System and US EPA EJ Screen.

communities. Restoration of Superfund Removal sites directly support Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad.* 595

EPA Federal On-Scene Coordinators (OSCs) make up the core of the Superfund Removal Program. These trained and equipped EPA personnel respond to, assess, mitigate, and clean up environmental releases regardless of the cause. States, local, and tribal communities rely upon the OSC's expertise and support to deal with environmental emergencies that are beyond their capabilities and resources.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.1, Clean Up and Restore Land for Productive Uses and Healthy Communities in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Superfund Removal Program will:

- In addition to other work addressing abandoned uranium mines (AUM) in other EPA program projects, address AUM impacts on the Navajo Nation (NN). The Agency requests \$3.0 million and 6 FTE to advance cleanup through removal actions at NN AUM sites. These additional resources will assist EPA and NN to accelerate actions laid out in the 2020 Ten Year Plan: Federal Actions to Address Impacts of Uranium Contamination on the Navajo Nation. ⁵⁹⁶
- Respond to, and provide technical assistance for, emergency responses, removal assessments, and limited time critical response actions (non-emergency responses). The Agency requests \$5.0 million for the removal of hazardous waste from communities, an amount that allows for approximately 11 more removal completions a year, a six percent increase from our FY 2023 target. This work would be conducted with an emphasis on advancing environmental justice and equitable outcomes.
- Conduct and participate in selected multi-media training and exercises for emergency responders. These events ensure readiness by focusing on necessary coordination and consistency across the Agency, enhance specialized technical skills and expertise, and strengthen partnerships with state, local, tribal, and other federal responders.
- Support the Environmental Response Team (ERT), which provides nationwide assistance and consultation for emergency response actions, including unusual or complex incidents. In such cases, the ERT supplies the OSC, or lead responder, with special equipment and technical or logistical assistance.
- Continue to deploy its National Incident Management Assistance Team to set up organizational systems that help with the long-term strategic planning and response efforts.

⁵⁹⁶ For more information, please refer to: https://www.epa.gov/sites/default/files/2021-02/documents/nnaum-ten-year-plan-2021-01.pdf.

 $^{^{595}}$ For additional information, please refer to: $\underline{\text{https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.}$

Performance Measure Targets:

(PM 137) Number of Superfund removals completed.	FY 2022 Target	FY 2023 Target
	183	183

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$1,804.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$3,008.0 / +6.0 FTE) This program change supports the implementation of the Navajo mining work in support of tribal and disadvantaged communities, including providing additional assistance to Navajo Nation to advance cleanup through removal actions. This investment includes \$1.06 million in payroll.
- (+\$5,023.0) This program change increases support for the removal of hazardous waste from communities, with an emphasis on advancing environmental justice and equitable outcomes.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §§ 104, 105, 106; Clean Water Act (CWA); and Oil Pollution Act (OPA).

Superfund: EPA Emergency Preparedness

Program Area: Superfund Cleanup Goal: Safeguard and Revitalize Communities Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023	FY 2023 President's Budget v. FY 2022 Annualized CR
Hazardous Substance Superfund	\$7,555	\$7,700	\$8,056	\$356
Total Budget Authority	\$7,555	\$7,700	\$8,056	\$356
Total Workyears	33.8	37.4	37.4	0.0

Program Project Description:

The Superfund Emergency Preparedness Program provides for EPA's engagement on the National Response Team (NRT) and Regional Response Teams (RRT) where it ensures federal agencies are prepared to respond to national incidents, threats, and major environmental emergencies. EPA implements the Emergency Preparedness Program in coordination with Department of Homeland Security and other federal agencies to deliver federal hazard assistance to state, local, and tribal governments.

The Agency carries out its responsibility under multiple statutory authorities as well as the National Response Framework (NRF), which provides the comprehensive federal structure for managing national emergencies. EPA is the designated lead for the NRF's Oil and Hazardous Materials Response Annex - Emergency Support Function #10 which covers responsibilities for responding to releases of hazardous materials, oil, and other contaminants that are a threat to human health and the environment. As such, the Agency participates and leads applicable interagency committees and workgroups to develop national planning and implementation policies at the operational level.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the FY 2022 - 2026 EPA Strategic Plan.

EPA continuously works to improve its management of emergency response assets to be better prepared to handle large, unprecedented incidents which increase cost effectiveness and avoid costly cleanup actions. The Superfund Emergency Preparedness Program participates in national and local exercises and drills, coordinates with stakeholders to develop Area and Regional Contingency Plans, and provides technical assistance to industry, states, tribes, and local communities. Specific activities include:

- Chair the NRT⁵⁹⁷ and co-chair the 13 RRTs. The NRT and RRTs are the only active environmentally focused interagency executive committees addressing oil and hazardous substance emergencies. They serve as multi-agency coordination groups supporting emergency responders when convened as incident specific teams.
- Participate in the development of limited, scenario-specific exercises and regional drills designed to assess national emergency response management capabilities. These activities will involve the RRTs, NRT, and/or principal level participants.
- Continue to implement the National Incident Management System⁵⁹⁸ which provides the approach to manage incidents and works hand in hand with the NRF.

Performance Measure Targets:

(PM ER01) Number of emergency response and removal exercises that EPA conducts or participates in.	FY 2022 Target	FY 2023 Target
EFA conducts or participates in.	120	120

(PM ER02) Percentage of emergency response and removal exercises that EPA conducts or participates in that incorporate environmental justice.	FY 2022 Target	FY 2023 Target
	14	21

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$290.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$66.0) This program change increases essential support for Superfund Emergency Preparedness Program core activities, such as national and local exercises and drills.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), §§ 104, 105, 106; Robert T. Stafford Disaster Relief and Emergency Assistance Act.

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⁵⁹⁷ For more information, please refer to: https://www.nrt.org/.

⁵⁹⁸ For more information, please refer to: http://www.fema.gov/national-incident-management-system.

Superfund: Remedial

Program Area: Superfund Cleanup Goal: Safeguard and Revitalize Communities

Objective(s): Clean Up and Restore Land for Productive Uses and Healthy Communities

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Hazardous Substance Superfund	\$639,714	\$589,000	\$454,601	-\$134,399
Total Budget Authority	\$639,714	\$589,000	\$454,601	-\$134,399
Total Workyears	936.8	868.8	873.8	5.0

Program Project Description:

The Superfund Remedial Program addresses many of the worst contaminated areas in the United States by investigating contamination and implementing long-term cleanup remedies at sites on the National Priorities List (NPL). The Program also oversees response work conducted by potentially responsible parties (PRPs) at NPL and Superfund Alternative Approach (SAA) sites.

By cleaning up and returning land to productive use, the Superfund Remedial Program improves the health and livelihood of all Americans and supports the Administration's goal to reduce exposure to Superfund site contamination, especially in disadvantaged communities. Approximately 22 percent of the U.S. population lives within three miles of a Superfund site, and this population is predominantly minority, low income, linguistically isolated, and less likely to have a high school education than the U.S. population as a whole. ⁵⁹⁹

Based on FY 2021 data more than 70 percent of Superfund Remedial site-specific funds were obligated to Superfund NPL sites where there is potential for environmental justice concerns. In the same period, 65 percent of the Superfund Program's accomplishments for Human Exposures Under Control and 50 percent of the accomplishments for Sitewide Ready for Anticipated Reuse were at sites where there is potential for environmental justice concern. ⁶⁰⁰

While conducting cleanup at NPL and SAA sites, remedial construction projects can enhance our national infrastructure while addressing harmful exposures. Cleanup work lowers human health risk; for example, recent research indicates that Superfund cleanup actions lowered the risk of elevated blood lead levels by roughly 13 to 26 percent for children living within 2 kilometers of a Superfund NPL site where lead is a contaminant of concern. ⁶⁰¹ For Superfund sites contaminated with lead, 18 percent of the surrounding population is below poverty level, 15 percent is without a high school degree, and 51 percent of the population is minority.

⁵⁹⁹ U.S. EPA, Office of Land and Emergency Management 2021. Data collected includes: (1) Superfund site information from SEMS as of the end of FY2020 and site boundary data from FY 2014 FOIA Request; and (2) population data from the 2015-2019 American Community Survey.

⁶⁰⁰ Data from EPA's Superfund Enterprise Management System and EPA's EJSCREEN.

⁶⁰¹ For more information, please refer to: https://www.epa.gov/environmental-economics/research-environmental-economics-ncee-working-paper-series.

By addressing the human health and environmental risks posed by releases at NPL and SAA sites, the Superfund Remedial Program strengthens the economy and spurs economic growth for all Americans by returning Superfund sites to productive use. Reuse and restoration of Superfund NPL sites directly support the Administration's Justice40 initiative, as articulated in President Biden's Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad* (January 27, 2021) as this EO acknowledges the urgent need to restore lands and natural assets. ⁶⁰² The Superfund Remedial Program is one of EPA's Justice40 pilot programs. A key goal of the White House Justice40 Initiative is to ensure that the benefits of federal investments flow to underserved communities. The Superfund Remedial Program is currently looking at ways to increase the delivery of benefits to disadvantaged communities to achieve the 40-percent goal within existing legal authorizations. The goal of Superfund's implementation plan is to maximize benefits currently offered in all aspects of the Superfund process. This includes maximizing cleanup benefits as well as state and tribal benefits, enforcement opportunities, and enhancements to community involvement and the Superfund Redevelopment Program.

In FY 2021, EPA made 26 Superfund sites ready for anticipated use. As of FY 2021, EPA data show that approximately 1,000 Superfund sites are in reuse - more than half the total number of sites placed on the NPL over the Program's existence. EPA has data on more than 10,230 businesses at 650 of these sites. These businesses' ongoing operations generate annual sales of \$65.8 billion. These businesses provided more than 246,000 jobs who earned a combined income of \$18.6 billion. Over the last eight years, these businesses generated at least \$384 billion in sales.

Additionally, cleanup work under the Superfund Remedial Program improves property values. A study conducted by researchers at Duke University and the University of Pittsburgh found that residential property values within 3 miles (4.8 kilometers) of Superfund sites increased between 18.7 and 24.4 percent when sites were cleaned up and deleted from the NPL. ⁶⁰³

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.1, Clean Up and Restore Land for Productive Uses and Healthy Communities in the FY 2022 - 2026 EPA Strategic Plan. Work in this program also directly supports progress toward the Agency Priority Goal: Clean up contaminated sites and invest in water infrastructure to enhance the livability and economic vitality of overburdened and underserved communities. By September 30, 2023, EPA will provide technical assistance to at least 10 communities to help achieve clean and safe water and reduced exposures to hazardous substances. ⁶⁰⁴

In FY 2023, the Agency requests \$454.6 million for the Superfund Remedial Program to continue cleaning up some of the Nation's most contaminated land, while beginning to adjust for revenue

⁶⁰² For more information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

⁶⁰³ Shanti Gamper-Rabindran and Christopher Timmons. 2013. "Does cleanup of hazardous waste sites raise housing values? Evidence of spatially localized benefits," Journal of Environmental Economics and Management 65(3): 345-360, http://dx.doi.org/10.1016/j.jeem.2012.12.001.

⁶⁰⁴ This Agency Priority Goal is implemented jointly with Goal 5.

from the Superfund chemical taxes. 605 EPA will prioritize resources to execute its non-delegable, federal responsibility to remediate sites and protect human health, welfare, and the environment. EPA endeavors to maximize the use of special account resources collected from PRPs for site-specific response actions as stipulated in settlement agreements. More than half of non-federal sites on the final NPL do not have an associated open special account and must rely on annually appropriated funds or funds provided by the Infrastructure Investment and Jobs Act of 2021 (IIJA).

The IIJA invests \$3.5 billion in environmental remediation at Superfund sites and reinstates the Superfund chemical taxes, making it one of the largest investments in American history to address the legacy pollution that harms public health in communities and neighborhoods, creating goodpaying jobs advancing economic and environmental justice in the process. This funding will allow EPA to initiate work on all backlogged remedial construction projects and accelerate cleanups at NPL sites across the country.

The FY 2023 Superfund funding requested will be used to start critical pre-construction projects such as site characterization and construction design, which will complement construction projects that utilize IIJA funding. The funding request also supports the Superfund's community involvement and outreach activities at sites. These activities play a pivotal role in ensuring communities have the resources they need to meaningfully participate in the decision-making process, including an increased involvement of communities to develop their visions for revitalization by identifying economic drivers and connecting community needs to federal investments. These funds will support capacity building technical assistance, and the Superfund Job Training Initiative.

In FY 2023, EPA will reduce exposure to lead and associated health impacts including the risk of elevated blood lead levels for children by completing at least 45 Superfund lead cleanup projects. EPA also will continue to support the cleanup of Per- and Polyfluoroalkyl Substances (PFAS) and will collaborate on cross-cutting strategies; advance new science; develop coordinated policies, regulations, and communications; assess the nature and extent of PFAS contamination and other contaminants of concern at sites; and engage with affected states, tribes, communities, and stakeholders. Additionally, completing these cleanup projects advances work in cancer prevention as part of President Biden's reignited Cancer Moonshot Initiative as many of these legacy sites expose Americans to contaminants that have been shown to cause an increased risk of cancer.

EPA's regional labs provide cutting-edge science to inform immediate and near-term, multi-media decisions on environmental conditions, emergency response, and enforcement. Regional laboratory science also helps inform communities about the risks the site may pose in terms of chemical exposures and cumulative environmental impacts. Strong science needs state-of-the-art equipment and the scientists to operate it. This investment will provide approximately \$3.9 million and 5 FTE to be allocated strategically across all ten Regions for replacement and upgrading of aging analytical equipment and modernization of the associated critical IT infrastructure. This new

Compensation, and Liability Act (CERCLA) of 1980, as amended.

⁶⁰⁵ On November 15, 2021, the Infrastructure Investment and Jobs Act [(IIJA), P.L. 117-58] reinstated and modified the excise taxes on certain listed chemicals and imported substances that are used as materials in their manufacture or production one or more of those listed chemicals ("Superfund chemical taxes"). The Superfund chemical taxes go into effect beginning July 1, 2022 and expire on December 31, 2031. In FY 2022, the U.S. Treasury forecasts collecting \$388 million in Superfund chemical taxes which will be available for use in FY 2023. EPA will utilize resources to carry out the Comprehensive Environmental Response,

analytical equipment will support the ambitious environmental and clean up goals of President Biden's agenda.

Performance Measure Targets:

(PM 151) Number of Superfund sites with human exposures brought under	FY 2022 Target	FY 2023 Target
control.	12	12

(PM 155) Number of Superfund cleanup projects completed that address	FY 2022 Target	FY 2023 Target
lead as a contaminant.	45	45

(PM 170) Number of remedial action projects completed at Superfund sites.	FY 2022 Target	FY 2023 Target
	80	75

(PM S10) Number of Superfund sites made ready for anticipated use site-	FY 2022 Target	FY 2023 Target
wide.	25	15

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$9,031.0) This change to fixed and other costs is an increase due to the recalculation of base payroll costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$147,286.0) This program change is a decrease to the Superfund Remedial Program. This reduction recognizes the additional funding invested in the Superfund Remedial Program by IIJA and availability of Superfund chemical tax revenues beginning in FY 2023.
- (+\$3,856.0 / +5.0 FTE) This investment will be allocated strategically across the regions for replacement and upgrading of aging analytical equipment and modernization of associated critical IT infrastructure. Regional EPA laboratories support EPA's mission by providing sound, and legally defensible scientific data to support decisions by EPA's Superfund Remedial Program. This investment includes \$906.0 thousand in payroll.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Superfund: Federal Facilities

Program Area: Superfund Cleanup Goal: Safeguard and Revitalize Communities

Objective(s): Clean Up and Restore Land for Productive Uses and Healthy Communities

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Hazardous Substance Superfund	\$24,264	\$21,800	\$36,272	\$14,472
Total Budget Authority	\$24,264	\$21,800	\$36,272	\$14,472
Total Workyears	107.6	109.7	112.7	3.0

Program Project Description:

The Superfund Federal Facilities Program oversees and provides technical assistance for the protective and efficient cleanup and reuse of Federal Facility National Priorities List (NPL) sites. Program responsibilities include: 1) inventory and assess potentially contaminated sites; 2) select and implement protective remedies; 3) facilitate early transfer of property; and 4) ensure ongoing protectiveness of completed cleanups.

The Federal Facility NPL sites, where the other federal agencies (OFAs) are the lead agency and EPA is the lead oversight agency, are among the largest in the Superfund Program and can encompass specialized environmental contaminants such as munitions and radiological waste, and contaminants of emerging concern such as per-and polyfluoroalkyl substances (PFAS). EPA jointly selects site remedies with OFAs and uses its oversight authority to provide an independent assessment of federal cleanups to ensure work conducted is in accordance with site cleanup plans and yields protective remedies. To ensure efficiencies and consistent approaches to cleanup, the Program collaborates with OFAs and state, local, and tribal governments. There are 174 Federal Facility sites on the NPL, which are part of the approximately 2,400 sites on the Federal Agency Hazardous Waste Compliance Docket maintained by EPA. The sites result in nearly \$9 billion per year expended by OFAs under EPA oversight. The resulting cleanup, restoration, and reuse of Federal Facility NPL sites contributes significantly to Superfund program accomplishments. In FY 2021, the Program completed response action decisions at 48 federal facility sites to address environmental contamination. The Program also achieved 32 Remedial Action Project Completions and reviewed 55 Five-Year Reviews to confirm protective remedies remain in place.

The Superfund Federal Facilities Program supports President Biden's Executive Order 13985: Advancing Racial Equity and Support for Underserved Communities Through the Federal

Government⁶⁰⁶ by recognizing and working to repair inequities that serve as barriers to equal opportunity in the Federal Facility Superfund Program. This is accomplished by working to improve the health and livelihood of communities through cleaning up and returning land to productive use. Over 68 percent of Federal Facility NPL sites are in communities disproportionately affected by environmental burdens. Cleaning up contaminated sites at federal facilities also can serve as a catalyst for economic growth and community revitalization.

The Superfund Federal Facilities Program has successfully worked with EPA's partners to facilitate the redevelopment of Federal Facility NPL sites across the country. Since Federal Facility NPL sites often encompass thousands of acres with buildings, roads, and other infrastructure, their effective and efficient cleanup and reuse can play a pivotal role in a community's economic growth and environmental vitality. Reuse and restoration of Federal Facility NPL sites directly support President Biden's Executive Order 14008: Tackling the Climate Crisis at Home and Abroad. 607 Redevelopment projects have included ecological preserves, recreational areas, cultural/historical resources, public transit infrastructure, and alternative energy sources. A 2021 economic analysis of 50 Federal Facility NPL sites identified over 2,000 businesses that generated \$17 billion in annual sales, provided over 220,000 jobs and \$19 billion in estimated annual employment income. 608 Future climate impact priorities for the Superfund Federal Facility program include the release of the FY 2022-2023 OLEM Climate Change Adaptation Plan, development of climate impact consideration training for Remedial Project Managers, and continuing collaboration with OFAs to include climate impact considerations in remedial actions.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.1, Clean Up and Restore Land for Productive Uses and Healthy Communities in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Superfund Federal Facilities Program, as part of its statutorily mandated oversight responsibilities will support the EPA PFAS Strategic Roadmap by overseeing the growing number of PFAS cleanups at Department of Defense (DOD), the Department of Energy (DOE), and OFA sites. The Program will benefit from a significant investment to keep pace with the surge of PFAS cleanups under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and restore core program capacity. Currently, the Program is challenged to keep pace with our oversight role at the 96 Federal Facility NPL sites with PFAS detections. Additionally, DOD is expected to initiate approximately 50 additional PFAS investigations in FY 2023.

An investment of \$13 million and 3 FTE in the Federal Facilities PFAS Program, in FY 2023, will allow EPA to minimize disruptions and delays to oversight responsibilities and enable DOD and other Federal Agencies to meet their Congressional cleanup obligations under the 2022 National Defense Authorization Act. EPA also is able to leverage knowledge and best practices developed from Federal Facilities PFAS investigations to aid PFAS cleanups across the country.

⁶⁰⁶ For additional information, please refer to: https://www.federalregister.gov/documents/2021/01/25/2021-01753/advancing-

racial-equity-and-support-for-underserved-communities-through-the-federal-government.

607 For additional information, please refer to: https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the- climate-crisis-at-home-and-abroad.

⁶⁰⁸ For additional information, please refer to: https://www.epa.gov/fedfac/redevelopment-economics-federal-facilities.

In addition to the growing workload related to PFAS, the Program will prioritize and continue to partner with OFAs; state, local, and tribal governments; and communities to limit human exposure to potentially harmful levels of lead in the environment. EPA will continue to oversee complex cleanups at Federal Facility NPL sites, such as contamination in groundwater, munitions and explosives of concern, contaminants of emerging concern, and contamination from legacy nuclear weapons development and energy research. For example, while the DOE has completed cleanup work at many of its sites, DOE estimates that the remaining legacy Cold War sites will take decades to complete due to groundwater, soil, and waste processing. Similarly, the DOD inventory includes sites that contain chemical and explosive compounds which require special handling, storage, and disposal practices, as well as cleanup. EPA will continue to provide oversight and technical assistance at DOD's military munitions response sites and support DOD's development of new technologies to streamline cleanups.

To ensure the long-term protectiveness of the remedies, the Agency will continue monitoring, overseeing progress, and improving the quality and consistency of Five-Year Reviews conducted at federal sites where waste has been left in place and land use is restricted. Five-Year Reviews are required under Section 121(c) of CERCLA and EPA's role is to concur or make its own independent protectiveness determination. EPA has been working collaboratively with DOD, DOE, and Department of the Interior (DOI) to improve the technical quality, timeliness, and cost of the five-year review reports and to ensure engagement with pollution-burdened and underserved communities. In FY 2023, the Superfund Federal Facilities Program will review approximately 35 five-year review reports to fulfill statutory requirements and to inform the public about the protectiveness of remedies.

In FY 2023, the Superfund Federal Facilities Program will target the highest risk sites and focus on activities that bring human exposure and groundwater migration under control. In addition, EPA manages the Federal Agency Hazardous Waste Compliance Docket (Docket) which contains information reported by federal facilities that manage hazardous waste or from which hazardous substances, pollutants, or contaminants have been or may be released. The Docket: 1) identifies all federal facilities that must be evaluated through the site assessment process; 2) determines whether they pose a risk to human health and the environment sufficient to warrant inclusion on the NPL; and 3) provides a mechanism to make the information available to the public. The Docket is updated semi-annually and has approximately 2,400 facilities listed.

Performance Measure Targets:

Work under this program supports performance results in the Superfund Remedial Program under the Superfund appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$760.0) This change to fixed and other costs is an increase due to the recalculation of base payroll costs for existing FTE, adjustments to provide essential workforce support, and changes to benefits costs.

• (\$13,712.0 / +3.0 FTE) This program change is an increase to address critical gaps in EPA's ability to oversee DOD PFAS cleanup under CERCLA and to restore core program capacity, including keeping pace with the Agency's oversight role at Federal Facilities NPL sites. This investment includes \$547.0 thousand in payroll.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 120.

Superfund Special Accounts

Background

EPA has the authority to collect funds from parties to support Superfund investigations and cleanups. Section 122(b)(3) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) authorizes EPA to retain and use funds received pursuant to a settlement agreement with a party to carry out the purpose of that agreement. Funds are deposited in Superfund special accounts for cleanup at the sites designated in individually negotiated settlement agreements. Through use of special accounts, EPA ensures responsible parties pay for cleanup so that annually appropriated resources from the Superfund Trust Fund and resources made available through the Infrastructure Investment and Jobs Act of 2021 are generally conserved for sites where no viable or liable potentially responsible parties (PRPs) can be identified. Each account is set up separately and distinctly and may only be used for the sites and uses outlined in the settlement(s) with the party or parties.

Special accounts are sub-accounts in the Superfund Trust Fund. Pursuant to the specific agreements, which typically take the form of an Administrative Order on Consent or a Consent Decree, EPA uses special account funds to finance site-specific CERCLA response actions at the site for which the account was established. Of the current 1,322 Superfund sites listed as final on the National Priorities List, more than half do not have special account funds available for use. As special account funds may only be used for sites and uses specified in the settlement agreement, both special account resources and appropriated resources are critical to the Superfund Program to clean up Superfund sites.

Special account funds are used to conduct many different site-specific CERCLA response actions, including, but not limited to, investigations to determine the nature and extent of contamination and the appropriate remedy, design, construction and implementation of the remedy, enforcement activities, and post-construction activities. EPA also may provide special account funds as an incentive to another PRP(s) who agrees to perform additional work beyond the PRP's allocated share at the site, which EPA might otherwise have to conduct. Because response actions may take many years, the full use of special account funds also may take many years. Once all site-specific response work pursuant to the settlement agreement is complete and site risks are addressed, special account funds may be used to reimburse EPA for site-specific costs incurred using appropriated resources (*i.e.*, reclassification), allowing the latter resources to be allocated to other sites. Any remaining special account funds are transferred to the Superfund Trust Fund, where they are available for future appropriation by Congress to further support response work.

FY 2021 Special Account Activity

Since the inception of special accounts through the end of FY 2021, EPA has collected \$7.8 billion from parties and earned approximately \$734.4 million in interest. Approximately 59 percent of the funds have been disbursed or obligated for response actions at sites and plans have been developed to guide the future use of the remaining 41 percent of available special account funds. In addition, at sites with no additional work planned or costs to be incurred by EPA, EPA has transferred over \$55.1 million to the Superfund Trust Fund. As of the end of FY 2021, over \$4.6 billion has been

disbursed for site response actions and approximately \$340.3 million has been obligated but not yet disbursed.

The Agency continues to receive site-specific settlement funds that are placed in special accounts each year, so progress on actual obligation and disbursement of funds may not be apparent upon review solely of the cumulative available balance. In FY 2021, EPA deposited more than \$221.8 million into special accounts and disbursed over \$251.4 million from special accounts (including reclassifications). At the end of FY 2021, the cumulative amount available in special accounts was over \$3.5 billion.

Special accounts vary in size. A limited set of accounts represent the majority of the funds available. At the end of FY 2021, 4 percent of open accounts had greater than \$10 million available and approximately 69 percent of all available funds in open accounts. There are many accounts with lower available balances. 74 percent of all open accounts with up to \$1 million available represent approximately 6 percent of available funds in all open accounts.

The balance of over \$3.5 billion is not equivalent to an annual appropriation. The funds collected under settlements are intended to finance future response work at particular sites for the length of the project. EPA is carefully managing those funds that remain available for site response work and develops plans to utilize the available balance. EPA will continue to plan the use of funds received to conduct site-specific response activities or reclassify and/or transfer excess funds to the Superfund Trust Fund to make annually appropriated funds available for use at other Superfund sites.

For some Superfund sites, although funds are readily available in a special account, remedial action may take time to initiate and complete. The timeframe required to implement a given remedial action is driven largely by site-specific conditions, such as the specific requirements for special account use set forth in the settlement agreement, the stage of site cleanup, the viability of other responsible parties to conduct site cleanup, and the nature of the site contamination. EPA has plans to spend approximately \$1.4 billion of currently available special account funds over the next 5 years, but funds also are planned much further into the future to continue activities, such as conducting five-year reviews or remedy optimization, at sites where waste has been left in place.

Over the past five fiscal years, the EPA has obligated or disbursed more than \$1.2 billion from special accounts (excluding reclassifications), resulting in the Superfund Program performing a significant amount of work in addition to work the Agency performed using annually appropriated funds. In FY 2021, EPA disbursed and obligated approximately \$217.0 million from special accounts (excluding reclassifications) for response work at more than 700 Superfund sites. Site-specific examples of this work include \$30.1 million to support work at Welsbach & General Gas Mantle site in New Jersey; \$15.2 million to support work at the New Bedford Harbor site in Massachusetts; \$11.7 million for the Cornell Dubilier Electronics Inc. site in New Jersey; and \$9.7 million for the Oklahoma Refining Co. site in Oklahoma. In the absence of special account funds, appropriated funds would have been necessary for these response actions to be funded. In other words, EPA was able to fund approximately \$217.0 million in response work at sites in addition to the work funded through appropriated funds obligated or disbursed in FY 2021.

The summary charts below provide additional information on the status of special accounts. Exhibit 1 illustrates the cumulative status of open and closed accounts, FY 2021 program activity, and planned multi-year uses of the available balance. Exhibit 2 provides the prior year (FY 2021), current year (FY 2022), and estimated future budget year (FY 2023) activity for special accounts. Exhibit 3 provides prior year data (FY 2021) by EPA regional offices to exhibit the geographic use of the funds.

Exhibit 1: Summary of FY 2021 Special Account Transactions and Cumulative Multi-Year Plans for Using Available Special Account Funds

Account Status ¹	Number of Accounts
Cumulative Open	1,232
Cumulative Closed	441
FY 2020 Special Account Activity	\$ in Thousands
Beginning Available Balance	
FY 2021 Activities	
+ Receipts	\$221,871.0
- Transfers to Superfund Trust Fund (Receipt Adjustment)	(\$11,632.6)
+ Net Interest Earned	\$67,702.0
- Net Change in Unliquidated Obligations	\$14,111.6
- Disbursements - For EPA Incurred Costs	(\$223,824.0)
- Disbursements - For Work Party Reimbursements under Final Settlements	(\$7,290.9)
- Reclassifications	<u>(\$20,305.0)</u>
End of Fiscal Year (EOFY) Available Balance ²	\$3,506,736.7
Multi-Year Plans for EOFY 2021 Available Balance ³	\$ in Thousands
2021 EOFY Available Balance	\$3,506,736.7
- Estimates for Future EPA Site Activities based on Current Site Plans ⁴	\$3,359,172.1
- Estimates for Potential Disbursement to Work Parties Identified in Final Settlements ⁵	\$73,116.8
- Estimates for Reclassifications for FYs 2022-2024 ⁶	\$35,885.7
- Estimates for Transfers to Trust Fund for FYs 2022-2024 ⁶	\$27,687.4
- Available Balance to be Planned for Site-Specific Response ⁷	\$10,874.6

¹ FY 2021 data is as of 10/01/2021. The Beginning Available Balance is as of 10/01/2020.

² Numbers may not add due to rounding.

³Planning data were recorded in the Superfund Enterprise Management System (SEMS) as of 11/01/2021 in reference to special account available balances as of 10/01/2021.

⁴ "Estimates for EPA Future Site Activities" includes all response actions that EPA may conduct or oversee in the future, such as removal, remedial, enforcement, post-construction activities as well as allocation of funds to facilitate a settlement to encourage PRPs to perform the cleanup. Planning data are multi-year and cannot be used for annual comparisons.

⁵ "Estimates for Potential Disbursements to Work Parties Identified in Finalized Settlements" includes those funds that have already been designated in a settlement document, such as a Consent Decree or Administrative Order on Consent, to be available to a PRP for reimbursements but that have not yet been obligated.

⁶ "Reclassifications" and "Transfers to the Trust Fund" are estimated for three FYs only. These amounts are only estimates and may change as EPA determines what funds are needed to complete site-specific response activities.

⁷These include resources received by EPA at the end of the fiscal year and will be assigned for site-specific response activities.

Exhibit 2: Actual and Estimated Special Account Transactions FY 2021 – FY 2023¹

	FY 2021	FY 2022 estimate	FY 2023 estimate
	\$ in Th	nousands	
Beginning Available Balance	\$3,466,104.7	\$3,506.736.7	\$3,700,941.7
Receipts ²	\$221,871.0	\$350,000.0	\$350,000.0
Transfers to Trust Fund (Receipt	(\$11,622,6)	(\$7.249.5)	(\$7.249.5)
Adjustment) ³	(\$11,632.6)	(\$7,348.5)	(\$7,348.5)
Net Interest Earned ⁴	\$67,702.0	\$100,000.0	\$100,000.0
Net Obligations ^{3,5}	(\$217,003.4)	(\$230,085.4)	(\$230,085.4)
Reclassifications ³	<u>(\$20,305.0)</u>	<u>(\$18,361.1)</u>	<u>(\$18,361.1)</u>
End of Year Available Balance ⁶	\$3,506.736.7	\$3,700,941.7	\$3,895,146.6

¹ FY 2021 data is as of 10/01/2021. The Beginning Available Balance is as of 10/01/2020.

Exhibit 3: FY 2021 Special Account Transactions by EPA Regional Offices

Dollars in Thousands

	Beginning Available Balance	Receipts	Transfers to Trust Fund (Receipt Adjustment)	Net Interest Earned	Net Obligations	Reclassifications	End of Year Available Balance ²
Region 1	\$187,105.8	\$7,584.3	(\$3,773.0)	\$4,020.7	(\$22,524.8)	(\$4,633.8)	\$167,779.2
Region 2	\$570,336.8	\$53,831.5	\$0.0	\$11,111.2	(\$70,905.5)	(\$557.3)	\$563,816.6
Region 3	\$171,375.8	\$13,482.1	(\$0.0)	\$3,181.5	(\$13,777.2)	(\$7,079.4)	\$167,182.8
Region 4	\$63,402.9	\$7,441.2	(\$198.6)	\$1,198.5	(\$3,905.8)	(\$3,391.4)	\$64,546.9
Region 5	\$414,742.0	\$56,102.6	(\$0.3)	\$10,318.6	(\$13,142.6)	(\$395.4)	\$467,624.9
Region 6	\$119,010.1	\$3,637.3	(\$4,907.3)	\$496.3	(\$16,489.5)	(\$2,178.1)	\$99,568.9
Region 7	\$148,474.0	\$5,455.6	(\$2,502.7)	\$2,422.7	(\$13,655.3)	(\$1,266.9)	\$138,927.3
Region 8	\$266,770.0	\$29,153.1	(\$75.4)	\$7,342.0	(\$22,515.3)	(\$222.2)	\$280,452.2
Region 9	\$1,371,820.8	\$18,714.1	(\$175.2)	\$24,052.3	(\$22,601.8)	(\$402.2)	\$1,391,408.0
Region 10	\$153,066.5	\$26,469.1	\$0.0	\$3,558.2	(\$17,485.5)	(\$178.4)	\$165,429.9
Total	\$3,466,104.7	\$221,871.0	(\$11,632.6)	\$67,702.0	(\$217,003.4)	(\$20,305.0)	\$3,506,736.7

¹ FY 2021 data is as of 10/01/2021. The Beginning Available Balance is as of 10/01/2020.

² The estimates for Receipts are in line with more typical years.

³ The estimates for Transfers to Trust Fund, Net Obligations, and Reclassifications are based on a three-year historical average.

⁴Net interest earned in FY 2022 and FY 2023 are estimated utilizing economic assumptions for the FY 2023 President's Budget.

⁵ Net Obligations reflect special account funds no longer available for obligation, excluding reclassifications and receipts transferred to the Trust Fund.

⁶ Numbers may not add due to rounding.

² Numbers may not add due to rounding.

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Environmental Protection Agency FY 2023 Annual Performance Plan and Congressional Justification

APPROPRIATION: Leaking Underground Storage Tanks Resource Summary Table

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Leaking Underground Storage Tanks				
Budget Authority	\$92,830	\$92,203	\$93,814	\$1,611
Total Workyears	43.6	46.6	46.6	0.0

Bill Language: Leaking Underground Storage Tanks

For necessary expenses to carry out leaking underground storage tank cleanup activities authorized by subtitle I of the Solid Waste Disposal Act, \$93,814,000, to remain available until expended, of which \$67,145,000 shall be for carrying out leaking underground storage tank cleanup activities authorized by section 9003(h) of the Solid Waste Disposal Act; \$26,669,000 shall be for carrying out the other provisions of the Solid Waste Disposal Act specified in section 9508(c) of the Internal Revenue Code: Provided, That the Administrator is authorized to use appropriations made available under this heading to implement section 9013 of the Solid Waste Disposal Act to provide financial assistance to federally recognized Indian tribes for the development and implementation of programs to manage underground storage tanks.

Note — A full-year 2022 appropriation for this account was not enacted at the time the Budget was prepared; therefore, the Budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of Public Law 117-43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.

Program Projects in LUST

(Dollars in Thousands)

Program Project	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Enforcement Civil Enforcement	\$625	\$620	\$653	\$33
Operations and Administration				
Central Planning, Budgeting, and Finance	\$343	\$416	\$448	\$32

	FY 2021	FY 2022 Annualized	FY 2023 President's	FY 2023 President's Budget v. FY 2022 Annualized
Program Project	Final Actuals	CR	Budget	CR
Facilities Infrastructure and Operations	\$932	\$836	\$724	-\$112
Acquisition Management	\$245	\$132	\$132	\$0
Subtotal, Operations and Administration	\$1,520	\$1,384	\$1,304	-\$80
Underground Storage Tanks (LUST / UST)				
LUST / UST	\$9,561	\$9,470	\$9,811	\$341
LUST Cooperative Agreements	\$55,438	\$55,040	\$55,040	\$0
LUST Prevention	\$25,383	\$25,369	\$26,669	\$1,300
Subtotal, Underground Storage Tanks (LUST / UST)	\$90,382	\$89,879	\$91,520	\$1,641
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	\$303	\$320	\$337	\$17
TOTAL LUST	\$92,830	\$92,203	\$93,814	\$1,611

Enforcement

Civil Enforcement

Program Area: Enforcement

Goal: Enforce Environmental Laws and Ensure Compliance Objective(s): Hold Environmental Violators and Responsible Parties Accountable

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$164,888	\$168,341	\$210,011	\$41,670
Leaking Underground Storage Tanks	\$625	\$620	\$653	\$33
Inland Oil Spill Programs	\$2,532	\$2,413	\$2,538	\$125
Total Budget Authority	\$168,045	\$171,374	\$213,202	\$41,828
Total Workyears	908.0	916.2	1,004.2	88.0

Program Project Description:

The Civil Enforcement Program's goal is to ensure compliance with the Nation's environmental laws to protect human health and the environment. The Program collaborates with the United States Department of Justice, and state, local, and tribal governments to ensure consistent and fair enforcement of environmental laws and regulations. The Civil Enforcement Program develops, litigates, and settles administrative and civil judicial cases against violators of environmental laws.

To protect the Nation's groundwater and drinking water from petroleum and hazardous substance releases from Underground Storage Tanks (UST), the Civil Enforcement Program provides guidance, technical assistance, and training to promote and enforce cleanups at sites with UST systems. ⁶⁰⁹ The Enforcement and Compliance Assurance Program uses its Leaking Underground Storage Tanks (LUST) resources to oversee cleanups by responsible parties.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Hold Environmental Violators and Responsible Parties Accountable in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA will work with states and tribes on a case-by-case basis to prioritize LUST enforcement goals for cleanup. The Agency also will continue to provide guidance, technical assistance, oversight, and training to enforce cleanups at LUST sites by responsible parties.

Performance Measure Targets:

Work under this program supports performance results in the Civil Enforcement Program under the EPM appropriation.

⁶⁰⁹ For more information, please refer to: https://www.epa.gov/ust.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$33.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic authority); Subtitle I of the Solid Waste Disposal Act.

Operations and Administration

Acquisition Management

Program Area: Operations and Administration Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$30,623	\$32,247	\$40,017	\$7,770
Leaking Underground Storage Tanks	\$245	\$132	\$132	\$0
Hazardous Substance Superfund	\$23,380	\$23,800	\$32,345	\$8,545
Total Budget Authority	\$54,248	\$56,179	\$72,494	\$16,315
Total Workyears	275.1	285.7	355.7	70.0

Program Project Description:

Leaking Underground Storage Tank (LUST) resources in the Acquisition Management Program support the Agency's contract activities.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA will continue to process contract actions in accordance with Federal Acquisition Regulation and guidance from the Office of Management and Budget Office of Federal Procurement Policy. Acquisition Management resources in LUST support information technology needs and the training and development of EPA's acquisition workforce.

EPA must scale up its federal grants and contractor workforce to support underserved communities, ensure the future is Made in All of America, and manage global supply chains. This investment will enable national programs to target their critical resources on environmental and programmatic priorities in partnership with the states, tribes and local governments. The Agency will work with Agency partners and stakeholders to include environmental justice considerations into grants policies and requirements and provide underserved communities better awareness and access to the Agency's financial assistance opportunities.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• There is no change in program funding.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Subtitle I of the Solid Waste Disposal Act.

Central Planning, Budgeting, and Finance

Program Area: Operations and Administration Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$71,528	\$76,718	\$89,154	\$12,436
Leaking Underground Storage Tanks	\$343	\$416	\$448	\$32
Hazardous Waste Electronic Manifest System Fund	\$154	\$0	\$0	\$0
Hazardous Substance Superfund	\$26,775	\$26,561	\$28,806	\$2,245
Total Budget Authority	\$98,800	\$103,695	\$118,408	\$14,713
Total Workyears	438.8	462.0	470.0	8.0

Total workyears in FY 2023 include 2.0 FTE funded by TSCA fees.

Program Project Description:

EPA's financial management community maintains a strong partnership with the Leaking Underground Storage Tanks (LUST) Program. Activities under the Central Planning, Budgeting, and Finance Program support the management of integrated planning, budgeting, financial management, performance and accountability processes, and systems to ensure effective stewardship of LUST resources. This includes providing financial payment and support services for specialized fiscal and accounting services for the LUST programs.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA will ensure secure, efficient, and sound financial and budgetary management of the LUST Program through the use of routine and ad hoc analysis, statistical sampling, and other evidence-based decision-making tools. Building on the work begun in previous years, EPA will continue to monitor and strengthen internal controls with a focus on sensitive payments and property. In addition, the Agency is reviewing its financial systems for efficiencies and effectiveness, identifying gaps, and targeting legacy systems for replacement.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

Total workyears in FY 2023 include 39.0 FTE to support Central Planning, Budgeting, and Finance working capital fund (WCF) services

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$32.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5, App.) (EPA's organic statute); Subtitle I of the Solid Waste Disposal Act.

Facilities Infrastructure and Operations

Program Area: Operations and Administration Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$257,524	\$285,441	\$288,293	\$2,852
Science & Technology	\$65,093	\$67,500	\$68,912	\$1,412
Building and Facilities	\$36,071	\$27,076	\$73,894	\$46,818
Leaking Underground Storage Tanks	\$932	\$836	\$724	-\$112
Inland Oil Spill Programs	\$628	\$682	\$641	-\$41
Hazardous Substance Superfund	\$81,976	\$68,727	\$71,219	\$2,492
Total Budget Authority	\$442,223	\$450,262	\$503,683	\$53,421
Total Workyears	334.2	315.4	325.4	10.0

Total work years in FY 2023 include 5.4 FTE to support Facilities, Infrastructure and Operations working capital fund (WCF) services.

Program Project Description:

Leaking Underground Storage Tank (LUST) resources in the Facilities Infrastructure and Operations Program fund the Agency's rent, utilities, and security. The Program also supports centralized administrative activities and support services, including health and safety, environmental compliance and management, facilities maintenance and operations, space planning, sustainable facilities and energy conservation planning and support, property management, mail, and transportation services. Funding for such services is allocated among the major appropriations for the Agency.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA will continue to take aggressive action to reconfigure EPA's workplaces with the goal of reducing long-term rent costs while increasing EPA facility resiliency and sustainability to combat the effects of climate change and ensure a space footprint that accommodates a growing workforce. For FY 2023, EPA is requesting \$509 thousand for rent in the LUST appropriation. EPA uses a standard methodology to ensure that rent charging appropriately reflects planned and enacted resources at the appropriation level. EPA also will continue working to increase sustainability and reduce carbon emissions through cost-effective solutions.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (-\$112.0) This change to fixed and other costs is a decrease due to the recalculation of rent and transit subsidy needs.

Statutory Authority:

Federal Property and Administration Services Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Research: Sustainable Communities

Research: Sustainable and Healthy Communities

Program Area: Research: Sustainable Communities Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Science & Technology	\$112,717	\$133,000	\$141,477	\$8,477
Leaking Underground Storage Tanks	\$303	\$320	\$337	\$17
Inland Oil Spill Programs	\$1,149	\$664	\$674	\$10
Hazardous Substance Superfund	\$13,458	\$16,463	\$16,927	\$464
Total Budget Authority	\$127,626	\$150,447	\$159,415	\$8,968
Total Workyears	442.3	421.8	441.8	20.0

Program Project Description:

EPA's Sustainable and Healthy Communities (SHC) Research Program under the Leaking Underground Storage Tanks (LUST) appropriation assists EPA's Office of Underground Storage Tanks, Regions, tribes, and states assess the degradation of Underground Storage Tanks (USTs). This assessment identifies vulnerable tanks before leaks occur and helps develop the tools to track and monitor the status of existing and abandoned USTs and their impact on the community in a changing climate. Specifically, this research provides information and tools designed to enable decision-makers to protect America's land, groundwater resources, and drinking water supplies that could be impacted by the Nation's more than 550,000 underground fuel storage tanks. 610

SHC will assess the impacts of climate change on USTs and understand the impacts on communities, including disadvantaged populations and those most vulnerable (e.g., tribes). SHC will develop tools and data to address issues related to USTs to protect public health and the environment based on the best available science.

Recent Accomplishments of the SHC Research Program include:

National Database on Underground Storage Tank Infrastructure⁶¹¹: In FY 2020, the first national database on underground storage tanks in the US was released by the Office of Research and Development (ORD). It provides geospatial data on facilities and tanks in association with drinking water sources, critical data on the aging infrastructure, and facilities that may be impacted by flooding. Researchers compiled and curated publicly available information regarding the attributes and locations of active and closed USTs, UST facilities, and LUST sites. In FY 2021, ORD instituted a training program to describe the capabilities and functions of the model to our

⁶¹⁰ For more information, please see: https://www.epa.gov/ust.

⁶¹¹ For more information, please see: https://intranet.ord.epa.gov/sites/default/files/2020-

^{12/}UST%20Finder%20User%20Guide 0.pdf and

https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=c220c67462e14763a8e0c4df75550278.

federal and state partners and their identified communities. The training will help our partners assess facility risk and triage sites for cleanup and protection of drinking water sources. A public website is available and being updated to meet additional partner needs with version 2.0 planned by the end of FY 2023.

FY 2023 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022-2026 EPA Strategic Plan*.

Work in this Program will aim to characterize sites and contaminants released from LUSTs identified under the LUST Trust Fund with an emphasis on assisting the Agency, tribes, and states to address the backlog of sites for remediation. SHC research will help communities remediate contaminated sites at an accelerated pace and lower costs, while reducing human health and ecological impacts. Resulting methodologies and tools will help localities, tribes, and states return properties to productive use, supporting the Agency's mission of protecting human health and the environment in communities. Such work is integral to achieving EPA's priority of safeguarding and revitalizing communities.

In FY 2023, EPA research will continue to develop models, metrics, and spatial tools for EPA regions, tribes, and states to evaluate the vulnerability of groundwater to LUSTs, the impacts of climate change, and the subsequent human health risks that follow contamination, considering environmental justice concerns. SHC will continue to focus on corrosion control methods to improve the lifespan of tanks and reduce the likelihood of leaking. SHC will assist EPA's Underground Storage Tanks Program, tribes, and states by updating technical guidance manuals and evaluations of risk to underground storage tank system components from new fuel formulations.

Research Planning:

EPA research is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is planned with their active involvement. Each research program is in the process of developing the fourth generation of the StRAPs, which will continue the practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its partners.

ORD works with various groups, including communities, to ensure the integrity and value of its research through a variety of mechanisms that include:

- EPA's Board of Scientific Counselors (BOSC)
 - o ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.

• State Engagement

o EPA's state engagement⁶¹² is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies.

• Tribal Partnerships

Key tribal partnerships are established through the Tribal Science Program which
provides a forum for the interaction between tribal and Agency representatives.
These interactions identify research of mutual benefit and lead to collaborations on
important tribal environmental science issues.

Performance Measure Targets:

Work under this program supports performance results in the Research: Sustainable and Healthy Communities Program under the S&T appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$14.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$3.0) This program change is an increase to the Sustainable and Healthy Communities LUST research program to help build capacity to address contaminants of emerging concern.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5 App.) (EPA's organic statute); Subtitle I of the Solid Waste Disposal Act.

⁶¹² For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

Underground Storage Tanks (LUST/UST)

Program Area: Underground Storage Tanks (LUST / UST)

Goal: Safeguard and Revitalize Communities

Objective(s): Clean Up and Restore Land for Productive Uses and Healthy Communities

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$10,373	\$11,250	\$12,564	\$1,314
Leaking Underground Storage Tanks	\$9,561	\$9,470	\$9,811	\$341
Total Budget Authority	\$19,931	\$20,720	\$22,375	\$1,655
Total Workyears	88.1	91.6	95.6	4.0

Program Project Description:

The Leaking Underground Storage Tank (LUST) resources in the LUST/Underground Storage Tank (UST) Program ensure that petroleum contamination is properly assessed and cleaned up. Potential adverse effects from chemicals such as benzene, methyl-tertiary- butyl-ether, alcohols, or lead scavengers in gasoline and the cost to clean up these contaminants underscore the importance of preventing UST releases and complying with UST requirements. Even a small amount of petroleum released from an UST can contaminate groundwater, the drinking water source for many Americans.

This program supports the Administration's priority of mitigating the negative environmental impacts to communities that are historically underserved, marginalized, and adversely affected by persistent poverty and inequality, as articulated in Executive Order 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*. As of July 2021, there were approximately 53 million people living within a quarter mile of an active UST facility, representing 16 percent of the total U.S. population. These communities tend to be more minority and lower income than the U.S. population as a whole. 614

Under this program, EPA supports the oversight and implementation of LUST cleanup programs in the states, ⁶¹⁵ and directly implements assessments and cleanups of petroleum contamination from USTs in Indian Country. EPA also provides technical assistance and training to states and tribes on how to conduct cleanups and improve the efficiency of state programs. As of September 2021, 61,981 LUST sites had not achieved cleanup completion. ⁶¹⁶ In FY 2021, 7,271 LUST

⁶¹³ For more information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.

⁶¹⁴ U.S. EPA, Office of Land and Emergency Management 2021. Data collected includes: (1) UST information as of late-2018 to mid-2019 depending on the state from ORD & OUST, UST Map,

https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=b03763d3f2754461adf86f121345d7bc; and (2) population data from the 2015-2019 American Community Survey.

⁶¹⁵ States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.

⁶¹⁶ For more information, please refer to: https://www.epa.gov/system/files/documents/2021-11/ca-21-34.pdf.

cleanups were completed nationally, including 9 in Indian Country. EPA will continue to collect and analyze information about the initiation and cleanup of UST releases.

As the direct implementer of the Program in Indian Country, EPA oversees cleanups by responsible parties, conducts site assessments, remediates contaminated water and soil, and provides alternative sources of drinking water when needed. EPA's funding for Indian Country is the primary source of money for these activities. With few exceptions, tribes do not have independent program resources to pay for assessing and cleaning up UST releases, and in many cases, there are no responsible parties available to pay for the cleanups at sites in Indian Country.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.1, Clean Up and Restore Land for Productive Uses and Healthy Communities in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA will engage in the following activities:

- Work with states and tribes to implement strategies to reduce the number of sites that have not reached cleanup completion and to address new releases as they continue to be confirmed.
- Provide targeted training to states and tribes, such as remediation process optimization and rapid site assessment techniques.
- Continue developmental updates to the Tribal Underground Storage Tank Database (TrUSTD), which was launched in FY 2021. This database provides a central repository for Tribal UST/LUST data that will both improve data analysis on the tribal UST/LUST universe, as well as create a platform that will make it easier for EPA to obtain and share tribal UST/LUST data with the public.
- Monitor the soundness of financial mechanisms, in particular, insurance and state cleanup funds that serve as financial assurance for LUST releases and ensure that money is available to pay for cleanups. In addition, EPA will continue to provide analysis and technical assistance to states to help them improve the environmental and financial performance of their cleanup funds.
- Provide support in Indian Country for site assessments, investigations, and remediation of high priority sites; enforcement against responsible parties; cleanup of soil and groundwater; alternate water supplies; cost recovery against UST owners and operators; oversight of responsible party lead cleanups; and technical expertise and assistance to tribal governments.
- Provide resources and support to states and tribes to quickly address emergency responses
 from releases to the environment. Releases from USTs can result in imminent threats to
 public safety when petroleum or petroleum vapors reach explosive levels in sewers, utility
 corridors, underground parking structures, and basements near a LUST site. Emergency

response incidents across the country show that reporting, initial abatement measures, and free product removal activities may need to be implemented immediately upon discovery of a release to protect human health and the environment.⁶¹⁷

Performance Measure Targets:

Work under this program supports performance results in the LUST Cooperative Agreements Program under the LUST appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$278.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$63.0) This program change increases support to underground storage tank cleanup, which invests in the health of municipalities and tribal communities.

Statutory Authority:

Resource Conservation and Recovery Act §§ 8001, 9001-9014.

⁶¹⁷ For more information, please refer to: http://astswmo.org/compendium-of-emergency-response-actions-at-underground-storage-tank-sites-version-2/.

LUST Prevention

Program Area: Underground Storage Tanks (LUST / UST)
Goal: Safeguard and Revitalize Communities
Objective(s): Reduce Waste and Prevent Environmental Contamination

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Leaking Underground Storage Tanks	\$25,383	\$25,369	\$26,669	\$1,300
Total Budget Authority	\$25,383	\$25,369	\$26,669	\$1,300

Program Project Description:

The goal of the Leaking Underground Storage Tank (LUST) Prevention Program is to ensure that groundwater sources are protected from petroleum and associated chemicals leaking from underground storage tanks (USTs). This work supports the Administration's priority of mitigating the negative environmental impacts to communities that are historically underserved, marginalized, and adversely affected by persistent poverty and inequality, as articulated in Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*. As of July 2021, approximately 53 million people live within a quarter mile of an active UST facility, representing 16 percent of the total U.S. population. These communities tend to be more minority and lower income than the U.S. population as a whole.

The LUST Prevention Program provides funding to states⁶²⁰ and tribes to prevent releases from the 539,610 active USTs by ensuring compliance with federal and state laws through inspections and other activities.⁶²¹ Preventing UST releases is more efficient and less costly than cleaning up releases after they occur. The Energy Policy Act (EPAct) of 2005 requires EPA or states to conduct inspections at each regulated UST once every three years.

Funding for LUST Prevention grants is subject to an annual, formula-based allocation process.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.2, Reduce Waste and Prevent Environmental Contamination in the FY 2022 - 2026 EPA Strategic Plan.

 $^{^{618}}$ For additional information, please refer to: $\frac{https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.$

⁶¹⁹ U.S. EPA, Office of Land and Emergency Management 2021. Data collected includes: (1) UST information as of late-2018 to mid-2019 depending on the state from ORD & OUST, UST Map,

https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=b03763d3f2754461adf86f121345d7bc; and (2) population data from the 2015-2019 American Community Survey.

⁶²⁰ States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.

⁶²¹ For more information, please refer to: https://www.epa.gov/system/files/documents/2021-11/ca-21-34.pdf.

Due to the increased emphasis on inspections and release prevention requirements, the number of confirmed releases has decreased from 6,847 in FY 2014 to 4,991 reported releases in FY 2021.

EPA estimates that only two percent of the Nation's 125,000 retail fuel locations have the appropriate equipment to store higher blends of ethanol, which means that the remaining UST systems will need some level of upgrade before they can safely and legally store E15. This poses a greater risk of having an accidental oil release in nearby communities. To help address this, EPA is requesting additional resources to establish a targeted, national program to improve the compatibility of UST systems with E15 in fenceline communities where E15 is more prevalently used.

Requested resources will be used to support additional state grant funding to support approximately 400 additional state inspections. These inspections will help ensure UST systems are compatible with E15 storage requirements and to triage sites that need more attention. This investment is one part of a collective plan to support the use of E15, while protecting the surrounding communities and compliments investments being proposed in LUST Prevention and Research: Sustainable and Healthy Communities.

As of FY 2021, 31 states and territories have reported compliance with the UST Technical Compliance Rate (TCR) measure, which came about after the UST rule was revised in 2015. The TCR includes new compliance measures for spill prevention and overfill requirements as well as additional leak detection requirements. More states will report on TCR as they reach their respective UST state regulation effective dates. Of the states that report TCR, they produce a TCR rate of 58 percent in FY 2021, which is consistent with the 58 percent rate from FY 2020.

The remaining 22 states and territories will continue to report the Significant Operational Compliance (SOC) rate until they reach their respective UST state regulation effective dates and move to the TCR. In FY 2021, EPA reported a SOC rate of 68 percent, which mirrors the results from FY 2019 and 2020.⁶²²

Major FY 2023 activities include core program priorities, such as inspecting UST facilities to meet the three-year inspection requirement and assisting states in adopting prevention measures (for example, delivery prohibition, secondary containment, and operator training). These activities emphasize bringing UST systems into compliance with release detection and release prevention requirements and minimizing future releases. Due to the Covid-19 pandemic, many states fell behind in their 3-year EPAct inspection frequency requirement. EPA will work with states to ensure they come back into compliance and return to their regular inspection cycles.

A lack of proper operation and maintenance for UST systems is one of the main causes of petroleum releases and was the main impetus for EPA to propose changes to the federal UST rule that was finalized in October 2015. In FY 2023, EPA anticipates all states to fully implement the new requirements associated with the federal rule.

EPA is responsible for implementing the UST regulations in Indian Country, in partnership with the tribes. Resources will be used to provide support with all aspects of the tribal prevention

⁶²² For more information, please refer to: https://www.epa.gov/ust/ust-performance-measures.

programs, including the development of inspection capacity. This includes providing money to support training for tribal staff and educating owners and operators in Indian Country about UST compliance requirements and, in some cases, assisting tribal staff to receive federal inspector credentials to perform inspections on behalf of EPA.

Performance Measure Targets:

(PM UST01) Number of confirmed releases at UST facilities.	FY 2022 Target	FY 2023 Target
	5,150	5,075

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$1,300.0) This program change requests grant funding to support the new fenceline communities program and approximately 400 additional state inspections that will focus on ensuring UST systems are compatible with E15.

Statutory Authority:

Solid Waste Disposal Act of 1976, as amended by the Superfund Amendments and Reauthorization Act of 1986, § 2007(f); Energy Policy Act, § 9011.

LUST Cooperative Agreements

Program Area: Underground Storage Tanks (LUST / UST)
Goal: Safeguard and Revitalize Communities

Objective(s): Clean Up and Restore Land for Productive Uses and Healthy Communities

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		FY 2022	FY 2023	FY 2023 President's
	FY 2021	Annualized		Budget v. FY 2022 Annualized
	Final Actuals	CR	Budget	CR
Leaking Underground Storage Tanks	\$55,438	\$55,040	\$55,040	\$0
Total Budget Authority	\$55,438	\$55,040	\$55,040	\$0

Program Project Description:

This funding is used to award cooperative agreements to states⁶²³ to implement the Leaking Underground Storage Tank (LUST) Program. The LUST Program ensures that petroleum contamination is properly assessed and cleaned up by providing states with funding to address releases, including in groundwater.⁶²⁴

This program supports the Administration's priority of mitigating the negative environmental impacts to communities that are historically underserved, marginalized, and adversely affected by persistent poverty and inequality as articulated in Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*. ⁶²⁵ As of July 2021, there were approximately 53 million people living within a quarter mile of an active UST facility, representing 16 percent of the total U.S. population. These communities tend to be more minority and lower income than the U.S. population as a whole. ⁶²⁶

LUST funding supports states in managing, overseeing, and enforcing cleanups at LUST sites. This is achieved by focusing on increasing the efficiency of LUST cleanups nationwide, leveraging private and state resources, and enabling community redevelopment. Cleaning up LUST sites protects people from exposure to contaminants and makes land available for reuse.

EPA's backlog study characterized the national inventory of sites that have not reached cleanup completion. The study found that almost half of the releases were 15 years old or older, and that groundwater was contaminated at 78 percent of these sites. Remediating groundwater contamination is often more technically complex, takes longer, and is more expensive than

⁶²³ States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.

⁶²⁴ Almost half of the Nation's overall population and 99 percent of the population in rural areas rely on groundwater for drinking water. (See *EPA 2000 Water Quality Inventory Report*, https://archive.epa.gov/water/archive/web/html/2000report_index.html).
625 For more information, please refer to: <a href="https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.

⁶²⁶ U.S. EPA, Office of Land and Emergency Management 2021. Data collected includes: (1) UST information as of late-2018 to mid-2019 depending on the state from ORD & OUST, UST Map,

https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=b03763d3f2754461adf86f121345d7bc; and (2) population data from the 2015-2019 American Community Survey.

remediating soil contamination.⁶²⁷ Potential adverse health effects from chemicals in gasoline such as benzene as well as methyl-tertiary-butyl-ether (MTBE), alcohols, or lead scavengers contribute to the importance of cleaning up these contaminants and increase the cost of cleaning up these sites.⁶²⁸

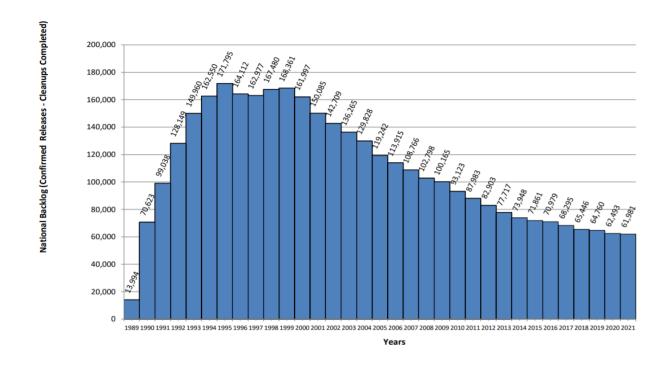
An EPA study published in 2018 determined impact of high-profile UST releases on housing prices. The study found that high profile UST releases decrease nearby property values 2 to 6 percent. Once a cleanup is completed, nearby property values rebound by a similar margin. ⁶²⁹

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.1, Clean Up and Restore Land for Productive Uses and Healthy Communities in the FY 2022 - 2026 EPA Strategic Plan.

The table below shows the progress made on the UST national backlog. EPA will continue to collect and analyze information about the initiation and cleanup of UST releases.

UST National Backlog: FY 1989 Through End-of-Year FY 2021



⁶²⁷ Please refer to *The National LUST Cleanup Backlog: A Study Of Opportunities*, September 2011, http://www.epa.gov/ust/national-lust-cleanup-backlog-study-opportunities.

⁶²⁸ Please see *Technologies for Treating MtBE and Other Fuel Oxygenates*, May 2004, pages 2-6 and 2-7, https://cluin.org/download/remed/542r04009/542r04009.pdf.

⁶²⁹ Guignet, D., Jenkins, R., Ranson, M., & Walsh, P. J. (2018). Contamination and incomplete information: Bounding implicit prices using high-profile leaks. *Journal of environmental economics and management*, 88, 259-282. https://doi.org/10.1016/j.jeem.2017.12.003.

In FY 2023, EPA will engage in the following activities:

- Collaborate with states to develop and implement flexible, state-driven strategies to reduce the number of remaining LUST sites that have not reached cleanup completion. Through the cooperative efforts between EPA and states, the backlog was reduced by approximately 40 percent between the end of 2008 and the end of 2021 (from 102,798 to 61,981). 630
- Provide resources to states to perform core cleanup work. Some states also may be able to pursue other means to maximize the effectiveness or efficiency in protectively completing cleanups and reducing their backlogs.
- Leverage funding by developing best practices and supporting management, guidance, and enforcement activities through LUST Cleanup Cooperative Agreements. LUST Cleanup Cooperative Agreements help achieve approximately 8,000 cleanups annually, whereas, if EPA were to apply the funding directly, only about 366 cleanups would occur annually (assuming an average cleanup cost of \$150 thousand per site). 631
- Provide resources and support to states to quickly address emergency responses from releases to the environment. Emergency response incidents across the country show that reporting, initial abatement measures, and free product removal activities need to be implemented immediately upon discovery of a release to protect human health and the environment. 632

The Energy Policy Act (EPAct) of 2005 requires that states receiving LUST Cooperative Agreements funding meet certain release prevention requirements, such as inspecting every facility at least once every three years. In FY 2023, EPA will continue to factor state compliance with EPAct requirements into LUST Cleanup Cooperative Agreement decisions.

Performance Measure Targets:

(PM 112) Number of LUST cleanups completed that meet risk-based standards for human exposure and groundwater migration.	FY 2022 Target	FY 2023 Target
	7,439	7,125

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

There is no change in program funding.

Statutory Authority:

Resource Conservation and Recovery Act § 9003(h)(7).

⁶³⁰ For more information, please refer to: http://www.epa.gov/ust/ust-performance-measures.

⁶³¹ Average cleanup cost per site based on ASTSWMO's 2019 Annual State Fund Survey Results at: http://astswmo.org/2019annual-state-fund-survey/.

632 For more information, please refer: http://astswmo.org/compendium-of-emergency-response-actions-at-underground-storage-

tank-sites-version-2/.

Environmental Protection Agency FY 2023 Annual Performance Plan and Congressional Justification

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APPROPRIATION: Inland Oil Spill Programs Resource Summary Table

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Inland Oil Spill Programs				
Budget Authority	\$19,601	\$20,098	\$26,502	\$6,404
Total Workyears	78.2	84.8	99.8	15.0

Bill Language: Inland Oil Spill Programs

For expenses necessary to carry out the Environmental Protection Agency's responsibilities under the Oil Pollution Act of 1990, including hire, maintenance, and operation of aircraft, \$26,502,000, to be derived from the Oil Spill Liability trust fund, to remain available until expended.

Note — A full-year 2022 appropriation for this account was not enacted at the time the Budget was prepared; therefore, the Budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of Public Law 117-43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.

Program Projects in Inland Oil Spill Programs

(Dollars in Thousands)

Program Project	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Compliance				
Compliance Monitoring	\$132	\$139	\$2,146	\$2,007
Underground Storage Tanks (LUST / UST)				
LUST / UST	\$0	\$0	\$0	\$0
Enforcement				
Civil Enforcement	\$2,532	\$2,413	\$2,538	\$125
Oil				
Oil Spill: Prevention, Preparedness and Response	\$15,160	\$16,200	\$20,503	\$4,303
Operations and Administration				

Program Project	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Facilities Infrastructure and Operations	\$628	\$682	\$641	-\$41
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	\$1,149	\$664	\$674	\$10
TOTAL Inland Oil Spill Programs	\$19,601	\$20,098	\$26,502	\$6,404

Compliance

Compliance Monitoring

Program Area: Compliance Laws and Ensure Compliance

Goal: Enforce Environmental Laws and Ensure Compliance Objective(s): Detect Violations and Promote Compliance

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$97,583	\$102,500	\$144,770	\$42,270
Inland Oil Spill Programs	\$132	\$139	\$2,146	\$2,007
Hazardous Substance Superfund	\$1,778	\$1,000	\$1,015	\$15
Total Budget Authority	\$99,493	\$103,639	\$147,931	\$44,292
Total Workyears	439.1	453.9	463.4	9.5

Program Project Description:

The Compliance Monitoring Program is a component of EPA's Enforcement and Compliance Assurance Program that allows the Agency to detect noncompliance and promotes compliance with the Nation's environmental laws. Under this program, EPA integrates the data from the Facility Response Plans (FRP) and Spill Prevention, Control, and Countermeasure (SPCC) systems into EPA's Integrated Compliance Information System (ICIS). Data related to compliance with FRP and SPCC requirements is made available to the public through EPA's Enforcement and Compliance History Online (ECHO) website.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Detect Violations and Promote Compliance in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Agency requests an additional \$2.0 million to continue accelerating efforts to modernize ICIS and support better integration with ECHO. The increased resources will fund adjustments to ICIS and ECHO that will facilitate better access of compliance data and community information (e.g., from EPA's EJSCREEN tool) to EPA and states and to the public. This modernization will enhance EPA's efforts to address compliance concerns in overburdened or vulnerable communities.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$6.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,001.0) This increase will allow EPA to accelerate its efforts to modernize ICIS and support better integration with ECHO and enhance efforts to address compliance concerns in overburdened and vulnerable communities.

Statutory Authority:

Oil Pollution Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Enforcement

Civil Enforcement

Program Area: Enforcement Laws and Ensure Compliance

Goal: Enforce Environmental Laws and Ensure Compliance Objective(s): Hold Environmental Violators and Responsible Parties Accountable

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$164,888	\$168,341	\$210,011	\$41,670
Leaking Underground Storage Tanks	\$625	\$620	\$653	\$33
Inland Oil Spill Programs	\$2,532	\$2,413	\$2,538	\$125
Total Budget Authority	\$168,045	\$171,374	\$213,202	\$41,828
Total Workyears	908.0	916.2	1,004.2	88.0

Program Project Description:

The Civil Enforcement Program's goal is to protect human health and the environment by ensuring compliance with the Nation's environmental laws. The Civil Enforcement Program collaborates with the U.S. Department of Justice, states, local, and tribal governments to ensure consistent and fair enforcement of environmental laws and regulations. The Civil Enforcement Program develops, litigates, and settles administrative and civil judicial cases against violators of environmental laws.

The Civil Enforcement Program's enforcement of Section 311 of the Clean Water Act, as amended by the Oil Pollution Act of 1990, is designed to ensure compliance with the prohibition against oil and hazardous substance spills that violate the statute, as well as the oil spill prevention, response planning, and other regulatory requirements. The Civil Enforcement Program develops policies, issues administrative compliance and penalty orders, and refers civil judicial actions to the Department of Justice to address spills, violations of spill prevention regulations, response planning regulations and other violations (*e.g.*, improper dispersant use or noncompliance with orders). The Program also will assist in the recovery of cleanup costs expended by the government and provides support for field investigations of spills, Facility Response Plan, Spill Prevention, Control, and Countermeasure, and other requirements.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Hold Environmental Violators and Responsible Parties Accountable in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2023, EPA will continue to streamline the Civil Enforcement Program, prioritize resources to achieve regulatory compliance, and address oil or hazardous substance spills in violation of the statute and deter future spills. The Agency will focus on facilities where enforcement will promote deterrence, tackle the climate crisis, integrate environmental justice considerations in our work to protect overburdened and underserved communities that have borne a disproportionate burden of pollution, and ensure that spills are prevented, cleaned up, and, where appropriate, mitigated. The

Civil Enforcement Program also will continue to coordinate with the Criminal Enforcement Program, as appropriate.

Performance Measure Targets:

Work under this program supports performance results in the Civil Enforcement Program under the EPM appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$102.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$23.0) This program increase will support EPA's efforts to achieve regulatory compliance and address oil or hazardous substance spills in violation of statute.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Clean Water Act; Oil Pollution Act.

Oil

Oil Spill: Prevention, Preparedness and Response

Program Area: Oil
Goal: Safeguard and Revitalize Communities

Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Inland Oil Spill Programs	\$15,160	\$16,200	\$20,503	\$4,303
Total Budget Authority	\$15,160	\$16,200	\$20,503	\$4,303
Total Workyears	64.8	70.6	85.6	15.0

Program Project Description:

The Oil Spill Prevention, Preparedness and Response Program protects the American people by preventing, preparing for, responding to, and monitoring inland oil spills. EPA is the lead federal responder for inland oil spills, including transportation-related spills from pipelines, trucks, railcars, and other transportation systems. In addition, the Program may provide technical assistance, assets, and outreach to industry, states, and local communities as part of the Agency's effort to prevent, prepare for, and respond to oil incidents. 633

There are approximately 550,000 Spill Prevention, Control, and Countermeasure (SPCC) facilities, including a subset of 3,840 Facility Response Plan (FRP) facilities identified as high risk due to their size and location. The Oil Pollution Act requires certain facilities that store and use oil to prepare response plans that are reviewed by EPA to ensure availability of response resources in the event of a discharge to navigable waters or adjoining shorelines.

To minimize the potential impacts to human health and the environment, the Agency targets inspections at facilities that pose the highest risk. Inspections are essential to ensuring that facility staff is knowledgeable about prevention and response plans, and quickly able to put these plans into action. The Agency currently inspects approximately 0.12 percent of SPCC facilities per year. In FY 2021, EPA found percent 91 of SPCC facilities inspected to be out of compliance at the time of inspection. FY 2021, EPA continued off-site compliance monitoring activities for 98 SPCC and 250 FRP facilities to further expand the compliance evaluation tools available to inspectors during the COVID-19 pandemic. EPA plans to continue to use off-site compliance monitoring to complement on-site inspections during FY 2023 and future years.

⁶³³ For more information, please refer to: https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations.

⁶³⁴ Information from the EPA Oil database.

⁶³⁵ In FY 2021, the Agency conducted 348 offsite compliance monitoring activities for SPCC and FRP.

⁴ For more information, please refer to: https://www.epa.gov/sites/production/files/2020-

EPA receives spill notifications through the National Response Center. The Agency is responsible for ensuring all inland oil spills are promptly responded to, working closely with state and local first responders on smaller spills and leading the response on larger spills. EPA accesses the Oil Spill Liability Trust Fund, administered by the U.S. Coast Guard, to obtain reimbursement funds for site specific oil spill response activities.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Oil Spill Prevention, Preparedness and Response Program will:

- Inspect oil facilities to ensure compliance with prevention and preparedness requirements. Inspections involve reviewing the facility's prevention, preparedness, and response plans and discussing key aspects of these plans with facility staff. EPA also will conduct unannounced exercises at FRP facilities to test the facility owner/operator's ability to put preparedness and response plans into action. Finally, EPA will conduct off-site compliance monitoring activities for oil facilities to allow inspectors to determine compliance from remote locations as another tool to promote regulatory compliance. EPA will focus inspections at high-risk facilities. Using the additional funding and FTE requested for FY 2023, the Program will increase inspections and compliance assistance at SPCC and FRP-regulated facilities, focusing on high-risk facilities located in communities with environmental justice concerns and communities with increased climate-related risks (e.g., extreme weather, flooding, wildfires, etc.). At a minimum, the Program expects to conduct an additional 150 inspections at SPCC and FRP-regulated facilities. The Program will develop additional compliance assistance materials, such as factsheets and facility guidance, reflecting the potential impacts of climate change and environmental justice.
- Maintain the National Contingency Plan's Subpart J product schedule, which identifies a list of products that may be used to mitigate oil spills.
- Target exercises to improve preparedness for communities with environmental justice concerns and increase incorporation of environmental justice into preparedness activities overall.
- Maintain the National Oil Database, which compiles data for the Program. The database assists in managing SPCC and FRP information obtained during inspections as well as serving as a historical repository. The Oil Database provides more efficient access to regulated facility information to streamline inspection activities and to identify regulatory applicability. Using the additional funding and FTE requested for FY 2023, EPA will continue upgrades to the National Oil Database to allow easier data entry, retrieval, and analysis in order to improve program implementation.
- Deliver required annual oil spill inspector training to federal inspectors and provide outreach to federal/state partners and industry stakeholders to improve compliance with

regulatory requirements. Using the additional funding and FTE requested for FY 2023, EPA also will develop inspector training materials and methods for inspectors to best assess SPCC and FRP facilities' incorporation of risks from natural hazards and climate change into their oil spill prevention and response plans.

• Under the Clean Water Act (CWA) authority, Subpart J of the National Contingency Plan (NCP) sets forth regulatory requirements for the use of chemical agents as an oil spill mitigation technology. In 2015, the Agency proposed amendments to Subpart J of the NCP that included revisions to the existing product listing, testing protocols, and authorization of use procedures, as well as new provisions for dispersant monitoring. EPA received a lawsuit notification in January 2020, for which the Court ultimately ruled in August 2021 that EPA must take final action by May 31, 2023. EPA finalized dispersant monitoring provisions in July 2021. In accordance with the Court ruling, the Agency will work to publish a final action for the remaining provisions by the ordered date, also addressing Administration priorities on environmental justice and climate change.

Performance Measure Targets:

Work under this program directly supports performance results in the Superfund: EPA Emergency Preparedness program under the Superfund appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$504.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$3,799.0 / +15.0 FTE) This program change is an increase to support Oil Spill Prevention, Preparedness, and Response activities in fenceline communities at risk from nearby oil facilities, including providing increased outreach/compliance assistance, improved inspector training, Oil Database improvements, regulatory updates, and inspections at regulated facilities to ensure facilities have measures in place to prevent oil accidents. In addition, resources will be used to develop inspector training materials and methods. This investment includes \$2.609 million in payroll.

Statutory Authority:

The Clean Water Act Section 311 as amended by the Oil Pollution Act.

Operations and Administration

Facilities Infrastructure and Operations

Program Area: Operations and Administration Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$257,524	\$285,441	\$288,293	\$2,852
Science & Technology	\$65,093	\$67,500	\$68,912	\$1,412
Building and Facilities	\$36,071	\$27,076	\$73,894	\$46,818
Leaking Underground Storage Tanks	\$932	\$836	\$724	-\$112
Inland Oil Spill Programs	\$628	\$682	\$641	-\$41
Hazardous Substance Superfund	\$81,976	\$68,727	\$71,219	\$2,492
Total Budget Authority	\$442,223	\$450,262	\$503,683	\$53,421
Total Workyears	334.2	315.4	325.4	10.0

Total workyears in FY 2023 include 5.4 FTE to support Facilities, Infrastructure and Operations working capital fund (WCF) services.

Program Project Description:

EPA's Facilities Infrastructure and Operations Program in the Inland Oil Spill Programs appropriation supports the Agency's rent, transit subsidy, and facility operations. Funding is allocated for such services among the major appropriations for the Agency.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA will continue to take aggressive action to reconfigure EPA's workplaces with the goal of reducing long-term rent costs while increasing EPA facility resiliency and sustainability to combat the effects of climate change and ensure a space footprint that accommodates a growing workforce. For FY 2023, EPA is requesting \$483 thousand for rent in the Inland Oil Spill Programs appropriation. EPA uses a standard methodology to ensure that rent charging appropriately reflects planned and enacted resources at the appropriation level. EPA also will continue working to increase sustainability and reduce carbon emissions through cost-effective solutions.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (-\$41.0) This change to fixed and other costs is a decrease due to the recalculation of rent and transit subsidy needs.

Statutory Authority:

Federal Property and Administration Services Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Research: Sustainable Communities

Research: Sustainable and Healthy Communities

Program Area: Research: Sustainable Communities Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Science & Technology	\$112,717	\$133,000	\$141,477	\$8,477
Leaking Underground Storage Tanks	\$303	\$320	\$337	\$17
Inland Oil Spill Programs	\$1,149	\$664	\$674	\$10
Hazardous Substance Superfund	\$13,458	\$16,463	\$16,927	\$464
Total Budget Authority	\$127,626	\$150,447	\$159,415	\$8,968
Total Workyears	442.3	421.8	441.8	20.0

Program Project Description:

EPA is the lead federal on-scene coordinator for inland oil spills and provides technical assistance, when needed, for coastal spills. EPA is responsible for oil spill preparedness, response, and associated research, as well as having the lead role to develop protocols for testing spill response products and agents, which is planned with the assistance of partner agencies including, the United States Coast Guard, United States Department of the Interior, United States Department of Transportation, and United States Department of Commerce.

EPA's Sustainable and Healthy Communities (SHC) Research Program for inland oil spills, funded through the Oil Spill Liability Trust Fund, 637 provides federal, tribal, state, and community decision-makers with analysis and tools to protect human and ecosystem health from the negative impacts of oil spills. EPA assists communities, including economically, socially, and environmentally disadvantaged or impacted communities, by supporting local officials in their response to a spill. As a result of EPA's research, responders can make more informed decisions on approaches and methods to reduce the spread and impact of coastal and inland oil spills, including pipeline and railway spills. Additionally, EPA's remediation expertise is critical in addressing potential impacts to communities and their environmental resources associated with pipeline and railway oil spills.

In support of these response efforts, EPA conducts research related to the Agency's National Contingency Plan (NCP) Product Schedule. The NCP is used nationwide by emergency responders and federal agencies in responding to oil spills. EPA's role is to develop and evaluate response approaches involving bioremediation, dispersants, and other additives. EPA also assesses impacts to surface water and groundwater, especially if they affect drinking water

⁶³⁶ For more information, please see: https://www.epa.gov/emergency-response/epas-scene-coordinators-oscs.

⁶³⁷ For more information, please see: https://www.uscg.mil/Mariners/National-Pollution-Funds-Center/About NPFC/OSLTF/.

⁶³⁸ For more information, please see: http://www2.epa.gov/emergency-response/national-contingency-plan-subpart-j.

supplies. The Agency relies on this research to provide testing procedures that inform cleanup decisions during an emergency spill response.

Recent Accomplishments of the SHC Research Program include: 639

Toxicity of sediment oiled with diluted bitumens to freshwater and estuarine species: EPA researchers advanced EPA's and the nation's capabilities to respond to oil spills through 1) the development of a conceptual framework for an integrated oil spill model for societal level questions; 640 2) evaluating in situ burning efficiencies for oil slicks on water; 641 3) developing autonomous and remotely operated underwater vehicles for detecting submerged and dispersed oil; 642 and 4) assessing the impact of salinity on the effectiveness of chemical dispersants. 643 The 2010 Deepwater Horizon oil spill resulted in an unprecedented amount of scientific data on the fate and impact of spilled oil in the ocean. EPA researchers published a paper presenting a framework based on four knowledge domains: ocean environment, biological ecosystems, socioeconomics, and human health. 640 A causal loop diagram was developed to evaluate linkages and data gaps, with largest knowledge gaps corresponding to the socioeconomics and human health domains. This research has prepared the Agency to understand human and environmental impacts of spilled oil in coastal waters and improves Agency preparedness for emergency response operations and the use of NCP Product Schedule treating agents.

FY 2023 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022-2026 EPA Strategic Plan*.

In FY 2023, the oil spill program will conduct research to support regulatory activities and protocol development for EPA's programs and to support state-delegated programs. This Program will provide on-demand technical support at federal, tribal, or state-managed cleanup sites, as well as assistance during emergencies. The Program will continue to conduct health, environmental engineering, and ecological research, and prepare planning and analysis tools for localities nationwide that will facilitate regulatory compliance and improve environmental and health outcomes.

640 Solo-Gabriele, H.M., T. Fiddaman, C. Mauritzen, C. Ainsworth, D. Abramson, I. Berenshtein, E.P. Chassignet, S.S. Chen, R.N. Conmy, J.W. Farrington, M. Feldman, D. French-McCay, K. Lee, Y. Liu, S.A. Murawski, C. Paris-Limouzy, A. Quigg, C. Wilson et al. (2021) Towards Integrated Modeling of the Long-term Impacts of Oil Spills. Marine Policy, 131: 104554. https://doi.org/10.1016/j.marpol.2021.104554

⁶³⁹ For a more complete view of accomplishments, please see: https://www.epa.gov/research/national-research-programs.

Gullett, B., J. Aurell, A. Holder, R.N. Conmy, D. Sundaravadivelu, N. Lamie, K. Stone, E. Holder (2021) Characterization of emissions and residues from measures to improve efficiency of in situ oil burns. International Oil Spill Conference Proceedings: Vol. 2021, No. 1. https://doi.org/10.7901/2169-3358-2021.1.1141223

⁶⁴² Conmy, R.N., L. DiPinto, A. Kukulya, O. Garcia, D. Sundaravadivelu, M. Gloekler, A. Hall, E. Fischell, D. Gomez-Ibanez (2021) Advances in underwater oil plume detection capabilities. International Oil Spill Conference Proceedings: Vol. 2021, No. 1, https://doi.org/10.7901/2169-3358-2021.1.1141330

⁶⁴³ Conmy, R.N., D. Sundaravadivelu, B.A. Schaeffer, B. Robinson, T. King, R. Grosser, E. Holder (2021) Characterizing dispersion effectiveness at varying salinities. International Oil Spill Conference Proceedings: Vol. 2021, No. 1. https://doi.org/10.7901/2169-3358-2021.1.1141274

Specific activities in FY 2023 include:

- Evaluating the toxicity of high-latitude crude oil treated with dispersants, surface washing agents and chemical herding agents. New knowledge from this research helps the oil spill response by providing more reliable standardized toxicity testing results for oil and spill response agents in an aquatic environment.
- Conducting research to better understand the aerobic biodegradation of petroleum oils treated with chemical herders and Surface Washing Agents (SWAs). This research is critical because 1) chemical herders are agents that remain in the environment after application; and 2) SWAs are the most used agents on the NCP Product Schedule. Thus, understanding the long-term fate of these agents is essential.

Research Planning:

EPA research is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is planned with their active collaboration and involvement. Each research program is in the process of developing the fourth generation of the StRAPs, which will continue the practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its partners.

The Office of Research and Development (ORD) works with various groups, including communities, to ensure the integrity and value of its research through a variety of mechanisms that include:

• EPA's Board of Scientific Counselors (BOSC)

ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.

- State Engagement
 - EPA's state engagement⁶⁴⁴ is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies.
- Tribal Partnerships

O Key tribal partnerships are established through the Tribal Science Program which provides a forum for the interaction between tribal and Agency representatives. These interactions identify research of mutual benefit and lead to collaborations on important tribal environmental science issues.

⁶⁴⁴ For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

Performance Measure Targets:

Work under this program supports performance results in the Research: Sustainable and Healthy Communities Program under the S&T appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$8.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2.0) This program change is an increase to the Sustainable and Healthy Communities Oil Spills research program, focusing on adding to research capacity to support regulatory activities and protocol development for EPA's programs and in support of state-delegated programs.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5 App.) (EPA's organic statute); Oil Pollution Act.

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APPROPRIATION: State and Tribal Assistance Grants Resource Summary Table

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v.
State and Tribal Assistance Grants				
Budget Authority	\$4,557,273	\$4,313,901	\$5,729,143	\$1,415,242
Total Workyears	8.3	7.0	126.6	119.6

Bill Language: State and Tribal Categorical Grants

For environmental programs and infrastructure assistance, including capitalization grants for State revolving funds and performance partnership grants, \$5,729,143,000, to remain available until expended, of which—

(1) \$1,638,847,000 shall be for making capitalization grants for the Clean Water State Revolving Funds under title VI of the Federal Water Pollution Control Act; and of \$1,126,095,000 shall be for making capitalization grants for the Drinking Water State Revolving Funds under section 1452 of the Safe Drinking Water Act: Provided, That for fiscal year 2023, to the extent there are sufficient eligible project applications and projects are consistent with State Intended Use Plans, not less than 10 percent of the funds made available under this title to each State for Clean Water State Revolving Fund capitalization grants shall be used by the State for projects to address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities: Provided further, That the Administrator is authorized to use any remaining funds made available under section 608(f) of title VI of the Federal Water Pollution Control Act (33 U.S.C. 1388), in addition to amounts otherwise available, after necessary funds are used to carry out the management and oversight of section 608, up to \$1,500,000 for conducting the Clean Watersheds Needs Survey: Provided further, That for fiscal year 2023, funds made available under this title to each State for Drinking Water State Revolving Fund capitalization grants may, at the discretion of each State, be used for projects to address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities: Provided further, that the Administrator is authorized to use any remaining funds made available under section 1452(4)(F)of the Safe Drinking Water Act, in addition to amounts otherwise available, after necessary funds are used to carry out the management and oversight of section 1452(4), up to \$1,500,000 for conducting the Drinking Water Needs Survey: Provided further, That notwithstanding section 603(d)(7) of the Federal Water Pollution Control Act, the limitation on the amounts in a State water pollution control revolving fund that may be used by a State to administer the fund shall not apply to amounts included as principal in loans made by such fund in fiscal year 2023 and prior years where such amounts represent costs of administering the fund to the extent that such amounts are or were deemed reasonable by the Administrator, accounted for separately from other assets in the fund, and used for eligible purposes of the fund, including administration: Provided further, That for fiscal year 2023, notwithstanding the provisions of subsections (g)(1), (h), and (l) of section 201 of the Federal Water Pollution Control Act, grants made under title II of such Act for

American Samoa, Guam, the Commonwealth of the Northern Marianas, the United States Virgin Islands, and the District of Columbia may also be made for the purpose of providing assistance: (1) solely for facility plans, design activities, or plans, specifications, and estimates for any proposed project for the construction of treatment works; and (2) for the construction, repair, or replacement of privately owned treatment works serving one or more principal residences or small commercial establishments: Provided further, That for fiscal year 2023, not-withstanding the provisions of such subsections (g)(1), (h), and (l) of section 201 and section 518(c) of the Federal Water Pollution Control Act, funds reserved by the Administrator for grants under section 518(c) of the Federal Water Pollution Control Act may also be used to provide assistance: (1) solely for facility plans, design activities, or plans, specifications, and estimates for any proposed project for the construction of treatment works; and (2) for the construction, repair, or replacement of privately owned treatment works serving one or more principal residences or small commercial establishments: Provided further, That for fiscal year 2023, notwithstanding any provision of the Federal Water Pollution Control Act and regulations issued pursuant thereof, up to a total of \$2,000,000 of the funds reserved by the Administrator for grants under section 518(c) of such Act may also be used for grants for training, technical assistance, and educational programs relating to the operation and management of the treatment works specified in section 518(c) of such Act: Provided further, That for fiscal year 2022, funds reserved under section 518(c) of such Act shall be available for grants only to Indian tribes, as defined in section 518(h) of such Act and former Indian reservations in Oklahoma (as determined by the Secretary of the Interior) and Native Villages as defined in Public Law 92–203: Provided further, That for fiscal year notwithstanding the limitation on amounts in section 518(c) of the Federal Water Pollution Control Act, up to a total of 2 percent of the funds appropriated, or \$30,000,000, whichever is greater, and notwithstanding the limitation on amounts in section 1452(i) of the Safe Drinking Water Act, up to a total of 2 percent of the funds appropriated, or \$20,000,000, whichever is greater, for State Revolving Funds under such Acts may be reserved by the Administrator for grants under section 518(c) and section 1452(i) of such Acts: Provided further, That for fiscal year 2023, notwithstanding the amounts specified in section 205(c) of the Federal Water Pollution Control Act, up to 1.5 percent of the aggregate funds appropriated for the Clean Water State Revolving Fund program under the Act less any sums reserved under section 518(c) of the Act, may be reserved by the Administrator for grants made under title II of the Federal Water Pollution Control Act for American Samoa, Guam, the Commonwealth of the Northern Marianas, and United States Virgin Islands: Provided further, That for fiscal Year 2023, notwithstanding the limitations on amounts specified in section 1452(j) of the Safe Drinking Water Act, up to 1.5 percent of the funds appropriated for the Drinking Water State Revolving Fund programs under the Safe Drinking Water Act may be reserved by the Administrator for grants made under section 1452(j) of the Safe Drinking Water Act: Provided further, That 10 percent of the funds made available under this title to each State for Clean Water State Re-volving Fund capitalization grants and 14 percent of the funds made available under this title to each State for Drinking Water State Revolving Fund capitalization grants shall be used by the State to provide additional subsidy to eligible recipients in the form of forgiveness of principal, negative interest loans, or grants (or any combination of these), and shall be so used by the State only where such funds are provided as initial financing for an eligible recipient or to buy, refinance, or restructure the debt obligations of eligible recipients only where such debt was incurred on or after the date of enactment of this Act, or where such debt was incurred prior to the date of enactment of this Act if the State, with concurrence from the Administrator, determines that such funds could be used to help address a

threat to public health from heightened exposure to lead in drinking water or if a Federal or State emergency declaration has been issued due to a threat to public health from heightened exposure to lead in a municipal drinking water supply before the date of enactment of this Act: Provided further, That in a State in which such an emergency declaration has been issued, the State may use more than 14 percent of the funds made available under this title to the State for Drinking Water State Revolving Fund capitalization grants to provide additional subsidy to eligible recipients: Provided further, That notwithstanding section 1452(o) of the Safe Drinking Water Act (42 U.S.C. 300j–12(o)), for fiscal years 2023–2027, the Administrator shall reserve \$12,000,000 of amounts made available for making capitalization grants for the Drinking Water State Revolving Funds to pay the costs of monitoring for unregulated contaminants under section 1445(a)(2)(C) of such Act;

- (2)\$30,000,000 shall be for architectural, engineering, planning, design, construction and related activities in connection with the construction of high priority water and wastewater facilities in the area of the United States-Mexico Border, after consultation with the appropriate border commission: Provided, That no funds provided by this appropriations Act to address the water, wastewater and other critical infrastructure needs of the colonias in the United States along the United States-Mexico border shall be made available to a county or municipal government unless that government has established an enforceable local ordinance, or other zoning rule, which prevents in that jurisdiction the development or construction of any additional colonia areas, or the development within an existing colonia the construction of any new home, business, or other structure which lacks water, wastewater, or other necessary infrastructure;
- (3) \$40,000,000 shall be for grants to the State of Alaska to address drinking water and wastewater infrastructure needs of rural and Alaska Native Villages: Provided, That of these funds: (A) the State of Alaska shall provide a match of 25 percent; (B) no more than 5 percent of the funds may be used for administrative and overhead expenses; and (C) the State of Alaska shall make awards consistent with the Statewide priority list established in conjunction with the Agency and the U.S. Department of Agriculture for all water, sewer, waste disposal, and similar projects carried out by the State of Alaska that are funded under section 221 of the Federal Water Pollution Control Act (33 U.S.C. 1301) or the Consolidated Farm and Rural Development Act (7 U.S.C. 1921 et seq.) which shall allocate not less than 25 percent of the funds provided for projects in regional hub communities;
- (4) \$130,982,000 shall be to carry out section 104(k) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), including grants, interagency agreements, and associated program support costs;
- (5) \$150,000,000 shall be for grants under title VII, subtitle G of the Energy Policy Act of 2005;
- (6) \$59,000,000 shall be for targeted airshed grants in accordance with the terms and conditions in the explanatory statement described in section 4 (in the matter preceding division A of this consolidated Act);
- (7) \$4,000,000 shall be to carry out the water quality program authorized in section 5004(d) of the Water Infrastructure Improvements for the Nation Act (Public Law 114–322);

- (8) \$80,002,000 shall be for grants under subsections (a) through (j) of section 1459A of the Safe Drinking Water Act (42 U.S.C. 300j–19a);
- (9) \$36,500,000 shall be for grants under section 1464(d) of the Safe Drinking Water Act (42 U.S.C. 300j-24(d));
- (10) \$182,002,000 shall be for grants under section 1459B of the Safe Drinking Water Act (42 U.S.C. 300j–19b);
- (11) \$25,000,000 shall be for grants under section 1459A(l) of the Safe Drinking Water Act (42 U.S.C. 300j–19a(l));
- (12) \$18,000,000 shall be for grants under section 104(b)(8) of the Federal Water Pollution Control Act (33 U.S.C. 1254(b)(8));
- (13) \$280,000,000 shall be for grants under section 221 of the Federal Water Pollution Control Act (33 U.S.C. 1301);
- (14) \$17,711,000 shall be for grants under section 4304(b) of the America's Water Infrastructure Act of 2018 (Public Law 115–270);
- \$1,311,004,000 shall be for grants, including associated program support costs, to States, (15)federally recognized tribes, interstate agencies, tribal consortia, and air pollution control agencies for multi-media or single media pollution prevention, control and abatement, and related activities, including activities pursuant to the provisions set forth under this heading in Public Law 104–134, and for making grants under section 103 of the Clean Air Act for particulate matter monitoring and data collection activities subject to terms and conditions specified by the Administrator, and under section 2301 of the Water and Waste Act of 2016 to assist States in developing and implementing programs for control of coal combustion residuals, of which: \$46,954,000 shall be for carrying out section 128 of CERCLA; \$15,000,000 shall be for Environmental Information Exchange Network grants, including associated program support costs; \$1,505,000 shall be for grants to States under section 2007(f)(2) of the Solid Waste Disposal Act, which shall be in addition to funds appropriated under the heading "Leaking Underground Storage Tank Trust Fund Program" to carry out the provisions of the Solid Waste Disposal Act specified in section 9508(c) of the Internal Revenue Code other than section 9003(h) of the Solid Waste Disposal Act; \$18,500,000 of the funds available for grants under section 106 of the Federal Water Pollution Control Act shall be for State participation in national- and State-level statistical surveys of water re- sources and enhancements to State monitoring programs; \$10,200,000 shall be for multipurpose grants, including interagency agreements, in accordance with the terms and conditions described in the explanatory statement described in section 4 (in the matter preceding division A of this consolidated Act);
- (16) \$10,000,000 shall be for carrying out section 302(a) of the Save Our Seas 2.0 Act (Public Law 116–224), including up to two percent of this amount for the Environmental Protection Agency's administrative costs. Provided That notwithstanding section 302(a) of such Act, the

- Administrator may also provide grants pursuant to such authority to intertribal consortia, consistent with the requirements in 40 C.F.R. 35.504(a), to former In- dian reservations in Oklahoma (as determined by the Secretary of the Interior), and Alaskan Native Villages as defined in Public Law 92–203;
- (17) \$50,000,000 shall be for grants under section 1442(b) of the Safe Drinking Water Act (42 U.S.C. 300j–1(b)), of which \$15,000,000 shall be for emergency situations affecting small public water systems;
- (18) \$5,000,000 shall be for grants under section 1454(c) of the Safe Drinking Water Act (42 U.S.C. 300j–14(c));
- (19) \$20,000,000 shall be for grants under section 1459A(m) of the Safe Drinking Water Act (42 U.S.C. 300j–19a(m));
- (20) \$50,000,000 shall be for grants under section 1459A(n) of the Safe Drinking Water Act (42 U.S.C. 300j–19a(n));
- (21) \$50,000,000 shall be for grants under section 1459E of the Safe Drinking Water Act (42 U.S.C. 300j–19f);
- (22) \$50,000,000 shall be for grants under section 1459F of the Safe Drinking Water Act (42 U.S.C. 300j–19g);
- (23) \$50,000,000 shall be for carrying out section 2001 of the America's Water Infrastructure Act of 2018 (Public Law 115–270, 42 U.S.C. 300j–3c note); Provided, that the Administrator may award grants and enter into contracts with tribes, intertribal consortia, public or private agencies, institutions, organizations, and individuals, without regard to section 3324(a) and (b) of title 31 and section 6101 of title 41, United States Code, and enter into interagency agreements as appropriate;
- (24) \$10,000,000 shall be for grants under section 1459G(b) of the Safe Drinking Water Act (42 U.S.C. 300j–19h(b));
- (25) \$75,000,000, in addition to amounts otherwise available, shall be for grants under sections 104(b)(3), 104(b)(8), and 104(g) of the Federal Water Pollution Control Act (33 U.S.C. 1254(b)(3), 1254(b)(8) and 1254(g));
- (26) \$20,000,000 shall be for grants under section 222 of the Federal Water Pollution Control Act (33 U.S.C. 1302);
- (27) \$25,000,000 shall be for grants under section 223 of the Federal Water Pollution Control Act (33 U.S.C. 1302a);
- (28) \$10,000,000 shall be for grants under section 224 of the Federal Water Pollution Control Act (33 U.S.C. 1302b);

- (29) \$50,000,000 shall be for grants under section 226 of the Federal Water Pollution Control Act (33 U.S.C. 1302d);
- (30) \$40,000,000 shall be for grants under section 227 of the Federal Water Pollution Control Act (33 U.S.C. 1302e);
- (31) \$15,000,000 shall be for grants under section 50213 of the Infrastructure Investment and Jobs Act (42 U.S.C. 10361 note; Public Law 117–58);
- (32) \$5,000,000 shall be for grants under section 50217(b) of the Infrastructure Investment and Jobs Act (33 U.S.C. 1302f(b); Public Law 117–58);
- (33) \$10,000,000 shall be for grants under section 50217(c) of the Infrastructure Investment and Jobs Act (33 U.S.C. 1302f(c); Public Law 117–58);
- (34) \$25,000,000 shall be for grants under section 220 of the Federal Water Pollution Control Act (33 U.S.C. 1300);
- (35) \$5,000,000 shall be for grants under section 124 of the Federal Water Pollution Control Act (33 U.S.C. 1276); and
- (36) \$25,000,000, in addition to amounts otherwise available, shall be for competitive grants to meet cybersecurity infrastructure needs within the water sector. Provided, That up to 5 percent of the funds appropriated under this heading in each of paragraphs (17) through (35) may be reserved for salaries, expenses, and administration, and may be transferred to the Environmental Programs and Management account or the Science and Technology account as needed.

Note.—A full-year 2022 appropriation for this account was not enacted at the time the Budget was prepared; therefore, the Budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of Public Law 117-43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.

Program Projects in STAG

(Dollars in Thousands)

Program Project State and Tribal Assistance Grants (STAG)	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Infrastructure Assistance: Alaska Native Villages	\$36,607	\$36,186	\$40,000	\$3,814
Brownfields Projects	\$101,296	\$90,982	\$130,982	\$40,000
Infrastructure Assistance: Clean Water SRF	\$1,788,798	\$1,638,826	\$1,638,847	\$21
Infrastructure Assistance: Drinking Water SRF	\$1,224,269	\$1,126,088	\$1,126,095	\$7

Program Project	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Infrastructure Assistance: Mexico Border	\$19,591	\$30,000	\$30,000	\$0
Diesel Emissions Reduction Grant Program	\$87,360	\$90,000	\$150,000	\$60,000
Targeted Airshed Grants	\$52,895	\$59,000	\$59,000	\$0
San Juan Watershed Monitoring	\$6,363	\$4,000	\$4,000	\$0
Safe Water for Small & Disadvantaged Communities	\$45,312	\$26,408	\$80,002	\$53,594
Reducing Lead in Drinking Water	\$40,053	\$21,511	\$182,002	\$160,491
Lead Testing in Schools	\$19,430	\$26,500	\$36,500	\$10,000
Drinking Water Infrastructure Resilience and Sustainability	\$0	\$4,000	\$25,000	\$21,000
Technical Assistance for Wastewater Treatment Works	\$0	\$18,000	\$18,000	\$0
Sewer Overflow and Stormwater Reuse Grants	\$6,308	\$40,000	\$280,000	\$240,000
Water Infrastructure Workforce Investment	\$0	\$3,000	\$17,711	\$14,711
Technical Assistance and Grants for Emergencies (SDWA)	\$0	\$0	\$35,000	\$35,000
Technical Assistance and Grants for Emergencies, Small Systems	\$0	\$0	\$15,000	\$15,000
Source Water Petition Program	\$0	\$0	\$5,000	\$5,000
Voluntary Connections to Public Water Systems	\$0	\$0	\$20,000	\$20,000
Underserved Communities Grant to Meet SDWA Requirements	\$0	\$0	\$50,000	\$50,000
Small System Water Loss Identification and Prevention	\$0	\$0	\$50,000	\$50,000
Midsize and Large Drinking Water System Infrastructure Resilience and Sustainability	\$0	\$0	\$50,000	\$50,000
Indian Reservation Drinking Water Program	\$0	\$0	\$50,000	\$50,000
Advanced Drinking Water Technologies	\$0	\$0	\$10,000	\$10,000
Clean Water Act Research, Investigations, Training, and Information	\$0	\$0	\$75,000	\$75,000

Program Project	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Wastewater Efficiency Grant Pilot Program	\$0	\$0	\$20,000	\$20,000
Clean Water Infrastructure Resiliency and Sustainability Program	\$0	\$0	\$25,000	\$25,000
Small and Medium Publicly Owned Treatment Works Circuit Rider Program	\$0	\$0	\$10,000	\$10,000
Grants for Low and Moderate income Household Decentralized Wastewater Systems	\$0	\$0	\$50,000	\$50,000
Connection to Publicly Owned Treatment Works	\$0	\$0	\$40,000	\$40,000
Water Data Sharing Pilot Program	\$0	\$0	\$15,000	\$15,000
Stormwater Infrastructure Technology	\$0	\$0	\$5,000	\$5,000
Stormwater Control Infrastructure Project Grants	\$0	\$0	\$10,000	\$10,000
Alternative Water Sources Grants Pilot Program	\$0	\$0	\$25,000	\$25,000
Enhanced Aquifer Use and Recharge	\$0	\$0	\$5,000	\$5,000
Water Sector Cybersecurity	\$0	\$0	\$25,000	\$25,000
Subtotal, State and Tribal Assistance Grants (STAG)	\$3,428,280	\$3,214,501	\$4,408,139	\$1,193,638
Categorical Grants				
Categorical Grant: Nonpoint Source (Sec. 319)	\$180,139	\$177,000	\$188,999	\$11,999
Categorical Grant: Public Water System Supervision (PWSS)	\$110,341	\$112,000	\$132,566	\$20,566
Categorical Grant: State and Local Air Quality Management	\$241,186	\$229,500	\$322,198	\$92,698
Categorical Grant: Radon	\$8,685	\$7,795	\$12,487	\$4,692
Categorical Grant: Pollution Control (Sec. 106)				
Monitoring Grants	\$15,458	\$17,267	\$19,515	\$2,248
Categorical Grant: Pollution Control (Sec. 106) (other activities)	\$212,284	\$212,733	\$232,023	\$19,290
Subtotal, Categorical Grant: Pollution Control (Sec. 106)	\$227,741	\$230,000	\$251,538	\$21,538

Program Project	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Categorical Grant: Wetlands Program Development	\$10,111	\$14,192	\$15,079	\$887
Categorical Grant: Underground Injection Control (UIC)	\$10,604	\$11,164	\$11,387	\$223
Categorical Grant: Pesticides Program Implementation	\$12,148	\$12,294	\$14,027	\$1,733
Categorical Grant: Lead	\$15,895	\$14,275	\$24,639	\$10,364
Resource Recovery and Hazardous Waste Grants	\$110,760	\$101,500	\$118,247	\$16,747
Categorical Grant: Pesticides Enforcement	\$24,321	\$24,000	\$25,580	\$1,580
Categorical Grant: Pollution Prevention	\$5,022	\$4,630	\$5,775	\$1,145
Categorical Grant: Toxics Substances Compliance	\$6,151	\$4,760	\$6,877	\$2,117
Categorical Grant: Tribal General Assistance Program	\$69,308	\$66,250	\$85,009	\$18,759
Categorical Grant: Underground Storage Tanks	\$1,475	\$1,475	\$1,505	\$30
Categorical Grant: Tribal Air Quality Management	\$12,964	\$13,415	\$23,126	\$9,711
Categorical Grant: Environmental Information	\$9,866	\$9,336	\$15,000	\$5,664
Categorical Grant: Beaches Protection	\$10,863	\$9,619	\$9,811	\$192
Categorical Grant: Brownfields	\$46,752	\$46,195	\$46,954	\$759
Categorical Grant: Multipurpose Grants	\$14,297	\$10,000	\$10,200	\$200
Subtotal, Categorical Grants	\$1,128,627	\$1,099,400	\$1,321,004	\$221,604
Clean and Safe Water Technical Assistance Grants				
Congressionally Mandated Projects	\$365	\$0	\$0	\$0
TOTAL STAG	\$4,557,273	\$4,313,901	\$5,729,143	\$1,415,242

Categorical Grants

Categorical Grant: Beaches Protection

Program Area: Categorical Grants Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$10,863	\$9,619	\$9,811	\$192
Total Budget Authority	\$10,863	\$9,619	\$9,811	\$192

Program Project Description:

EPA's Beach Grant Program awards grants to eligible coastal and Great Lakes states, territories, and tribes to improve water quality monitoring at beaches and to notify the public of beach advisories and closings. The Beach Grant Program is a collaborative effort between EPA, states, territories, local governments, and tribes to help ensure that coastal and Great Lakes recreational waters are safe for swimming. Congress created the program with the passage of the Beaches Environmental Assessment and Coastal Health Act (BEACH Act) with the goal of reducing risk to the public of waterborne disease related to the use of recreational water.

EPA awards grants to eligible states, territories, and tribes using an allocation formula developed in consultation with states and other organizations. The allocation takes into consideration beach season length, beach miles, and beach use. 645

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

Eligible states, territories, tribes, and localities will receive grant funding to continue to:

- Administer the grant program;
- Implement monitoring and notification programs consistent with EPA guidance; and,
- Submit monitoring and advisory data to EPA for production of an annual report⁶⁴⁶ in a timely manner.

⁶⁴⁵ For more information , please see: www.epa.gov/beach-tech/beach-grants. See, EPA's Beach Advisory and Closing On-line Notification (BEACON) system (https://watersgeo.epa.gov/beacon2/Beacon.html) for water quality and notification data that grant recipients provide to EPA.

⁶⁴⁶ For more information, please see: https://www.epa.gov/beach-tech/annual-beach-swimming-season-reports.

 $^{\text{In FY}}\,20^{23,\,\text{f}}\text{unding will be used to}^{:}$

- Increase number of tribes receiving BEACH Act grant funds;
- Increase allocation to each eligible tribe to allow for effective implementation of notification and monitoring programs and required reporting; and,
- Increase allocation for jurisdictions to add notification and monitoring programs at beaches in underserved communities per the Administration's Justice40 initiative.

Performance Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$192.0) This increase of resources supports EPA's state and tribal partners through the Beaches grants program.

Statutory Authority:

Clean Water Act, BEACH Act of 2000.

Categorical Grant: Brownfields

Program Area: Categorical Grants Goal: Safeguard and Revitalize Communities

Objective(s): Clean Up and Restore Land for Productive Uses and Healthy Communities

(Dollars in Thousands)

	(=)			
		FY 2022	FY 2023	FY 2023 President's Budget v.
	FY 2021	Annualized	President's	FY 2022 Annualized
	Final Actuals	CR	Budget	CR
State and Tribal Assistance Grants	\$46,752	\$46,195	\$46,954	\$759
Total Budget Authority	\$46,752	\$46,195	\$46,954	\$759

Program Project Description:

EPA's Brownfields Program is a successful model of the Agency working cooperatively with states, tribes, local governments, and other agencies to help communities oversee, plan, assess, and cleanup brownfield properties. State and Tribal Response Programs address contaminated sites that do not require federal action but need assessment and/or cleanup before they can be considered ready for reuse. The Program allocates funding to states and tribes to establish core capabilities, enhance their response programs, and conduct site assessments and cleanups.

Approximately 143 million people (roughly 44 percent of the U.S. population) live within three miles of a brownfields site that received EPA funding. Since its inception, the Brownfields Program has fostered a community-driven approach to the reuse of contaminated sites. As of March 2022, the State and Tribal Response Programs have leveraged more than 15,474 jobs and \$2.7 billion in other funding. State and Tribal funding spent on site-specific brownfields work has contributed to 3,868 sites assessed, 518 sites cleaned up, and 1,667 sites made ready for anticipated reuse (RAU). Sites receiving these funds are 1.5 times more likely to become RAU than sites receiving brownfields competitive grant funding alone. In 2021, EPA provided funding to 171 states, tribes, territories, and the District of Columbia.

This funding is a critical source for state and tribal partners to establish and grow their brownfields programs. Over 100 tribes have received brownfields funding to build their programs, and cumulatively these programs have cleaned up over 3,600 properties and made over 110,000 acres ready for reuse. Addressing brownfields on tribal lands also has leveraged over 1,020 jobs and \$150 million. 649

745

⁶⁴⁷ U.S. EPA, Office of Land and Emergency Management 2020. Data collected includes: (1) Superfund, Brownfield, and RCRA CA site information as of the end of FY2019; (2) UST/LUST information as of late-2018 to mid-2019 depending on the state; and (3) 2015-2018 American Community Survey (ACS) Census data.

⁶⁴⁸ Data from U.S. EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES).

⁶⁴⁹ Data from U.S. EPA ACRES.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.1, Clean Up and Restore Land for Productive Uses and Healthy Communities in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA requests an investment of \$759 thousand to provide states and tribal nations with additional financial and technical assistance resources to build their state and tribal response programs. This investment also will assist our partners to achieve progress on the ground. EPA will continue to allocate funding support to approximately 170 state and tribal response programs to oversee the cleanup at approximately 35,000 properties.

States and tribes may use categorical grant funding provided under this program in the following ways:

- Conducting site-specific activities, such as assessments and cleanups at brownfields sites; 650
- Developing mechanisms and resources to provide meaningful opportunities for public participation;
- Developing mechanisms for approval of cleanup plans, and verification and certification that cleanup efforts are complete;
- Creating an inventory of brownfields sites;
- Capitalizing a Revolving Loan Fund for brownfields-related work;
- Developing a public record;
- Developing oversight and enforcement authorities, or other mechanisms and resources;
- Purchasing environmental insurance;
- Developing state and tribal tracking and management systems for land use, institutional and engineering controls; and
- Conducting public education and outreach efforts to ensure that tribal communities are informed and able to participate in environmental decision-making.

Performance Measure Targets:

Work under this program supports performance results in the Brownfields Projects Program under the STAG appropriation.

⁶⁵⁰ For more information, please refer to: https://www.epa.gov/brownfields/state-and-tribal-response-program-grants.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$759.0) This increase will provide states and tribal nations with additional financial and technical assistance resources to build their brownfields response programs. This investment will assist our partners to achieve progress on the ground.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 128(a).

Categorical Grant: Environmental Information

Program Area: Categorical Grants Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$9,866	\$9,336	\$15,000	\$5,664
Total Budget Authority	\$9,866	\$9,336	\$15,000	\$5,664

Program Project Description:

The funds provided under this categorical grant support the Environmental Information Exchange Network (EN), which is a critical component of the Agency's Data Strategy and supports Executive Order (EO) 13985: *Advancing Racial Equality and Support for Underserved Communities through the Federal Government*. The EN is a standards-based, secure approach for EPA and its tribal, state, and territorial partners to exchange and share environmental data over the internet. The EN offers its partners tremendous potential for managing, accessing, and analyzing environmental data more effectively and efficiently.

The Exchange Network Grant Program provides funding to tribes, states, and territories to support their participation in the EN through integration and development of tools leveraging EN technology, data standards, open-source software, shared services, and reusable components. EN partners acquire and develop the hardware, software, and data infrastructure needed to collect, report, and access environmental data with greater efficiency and integrate information across programs. The EN is the standard approach to share data across tribes, states, territories, and EPA. The EN Grant Program also plays a critical role in evolving the EN technology to support the vision of the Digital Strategy.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Environmental Information Programs and activities will continue to focus on environmental justice (EJ) for tribal, state, and territorial partnerships in support of EO 13985: *Advancing Racial Equality and Support for Underserved Communities through the Federal Government*. The EN Program plays a critical role in supporting the Administration's comprehensive approach to advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality. Tribes are often understaffed and under resourced and lack the capacity to take on the development of data and Information Technology (IT) management related environmental media.

⁶⁵¹ For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.

Outreach, training, and targeted Data and IT capacity building funding opportunities within the EN Grant Program Solicitation Notice have resulted in tribes receiving 29 percent of grant resources awarded in FY 2021.

In FY 2023, the EN Grant Program will prioritize increasing the Data and IT management capacity of the tribal and territorial partners to increase their participation in the EN. A key funding area within the FY 2023 EN Grant Solicitation Notice will continue to be capacity building for tribes and territories with the inclusion of mentoring resources for first time tribal and territorial applicants. EPA annually awards over \$2.5 million of overall grant program resources to tribal recipients. To increase the support for tribal and territorial partners, EPA requests an increase of approximately \$5.7 million in FY 2023 to establish a minimum funding level within the overall EN Grant program funding exclusively dedicated to tribal & territorial grantees to build capacity with funding assistance and mentoring. Under this minimum funding level, EPA estimates an additional 15 to 17 tribal and territorial grants will be awarded for a total of 26 to 31 FY 2023 tribal and territorial awards. EPA will continue to work agencywide to improve the leveraging of grant resources that sustain tribal Data and IT management activities.

Through its Cooperative Agreement with the Institute for Tribal Environmental Professionals (ITEP), the EN Grant Program will support multiple Data Academy sessions which emphasize basic data management skills critical to effectively manage environmental programs. The annual Tribal EN Conference held by ITEP will continue to focus on Data and IT management training sessions. It also will include information transfer sessions based on topics identified by over 100 tribes in a baseline assessment conducted by a Tribal EN Group supported by ITEP as well as input from tribes to the Office of Mission Support - Environmental Information (OMS-EI) Tribal five-year Strategic Plan, which is planned to be completed in FY 2022. Outreach activities such as webinars and story maps outlining tribal success stories from using EN Grant Program awards also will continue to be a high priority to expand tribal knowledge about the benefits of applying for EN grants.

Tribal engagement and participation in EN efforts has significantly increased over the past few years with tribes participating in governance groups. As a result, tribes have requested greater EN program administration support, comparable to what states receive. Given the continuing growth in tribal participation in the EN and the expansion of rural broadband through the American Broadband Initiative, EPA anticipates many more tribes will engage in data management and electronic reporting and, consequently, there will be expanded interest in tribal participation in the EN. In response to this need, EPA will dedicate resources for program administration support to increase tribal engagement in the EN. These resources will support strategic planning and developing implementation approaches for tribes to participate in the EN, build data management and technical capacity, and enable the EN Grant Program to measure the effectiveness of these approaches to meet this goal. This will support EO 13985 and strengthen EJ to revitalize underserved communities.

In FY 2023, EPA will continue to support the EN through a cooperative agreement with the Environmental Council of the States under the associated program support cost authority (Public

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⁶⁵² For additional information, please see: https://www.ntia.doc.gov/blog/2019/american-broadband-initiative-expand-connectivity-all-americans.

Law 113-76⁶⁵³). This includes direct support to governance, which represents a cross-section of EPA, state, and tribal organizations.

Under this strategy of state, local, and tribal partnerships, the Agency will continue to advance its business processes, data management, and systems to reduce reporting burden on states and regulated facilities, as well as improve the effectiveness and efficiency of environmental protection programs for all partners. Currently, a total of 166 state, tribal, and territorial partners qualify for EN grants projects. In FY 2023, at the requested resource level, EPA anticipates awarding between 50 and 55 grants with 26 to 31 of these grants being awarded to tribes. The grant awards will assist states, tribes, and territories in implementing activities that align with the three areas outlined in the EN Solicitation Notice. These are:

- Increased Data Access and Innovative Business Processes: These activities support the partners' ability to share cross-state, cross-tribal or state-tribal data. The emphasis is on activities which create services and tools that make data available and sharable on-demand through portals, web services, and application programming interfaces. EN partners are encouraged to implement innovative approaches to collecting, publishing, and sharing data that reduce costs associated with capturing data in the field while making it more accessible to stakeholders.
- Eliminate paper submittals and expand e-reporting: Grant projects will support developing and implementing EN air, water, and land data flows that enable automated reporting to EPA systems.
- Augment the Information Management Capacity of EN Partners: Some existing and
 potential tribal and territorial EN partners have limited experience with electronic data
 collection and management. Tribal and territorial governments can use grants to conduct
 coordinated efforts and leverage the EN services given their unique regulatory
 responsibilities and data needs.

The "National Environmental Information Exchange Network Grant Program Solicitation Notice" sets forth the process for awarding grant funding to states, tribes, and territories. ⁶⁵⁴ It is an annual guidance document that describes eligibility requirements, the process for application preparation and submission, evaluation criteria, award administration information, and post-award monitoring procedures.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

⁶⁵³ For additional information, please see: https://www.gpo.gov/fdsys/pkg/PLAW-113publ76/pdf/PLAW-113publ76.pdf.

⁶⁵⁴ For additional information, please see: https://www.epa.gov/exchangenetwork/exchange-network-grant-program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$5,664.0) This program change proposes to increase the funding available for tribal & territorial grant applicants to build capacity with funding assistance and mentoring. This investment also supports Executive Order 13985: *Advancing Racial Equality and Support for Underserved Communities through the Federal Government*.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Consolidated Appropriations Act, 2022, Pub. L. 117-103.

Resource Recovery and Hazardous Waste Grants

Program Area: Categorical Grants Goal: Safeguard and Revitalize Communities Objective(s): Reduce Waste and Prevent Environmental Contamination

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$110,760	\$101,500	\$118,247	\$16,747
Total Budget Authority	\$110,760	\$101,500	\$118,247	\$16,747

Program Project Description:

The Hazardous Waste Financial Assistance Grants help states implement the Resource Conservation and Recovery Act (RCRA). Through RCRA, EPA and states protect human health and the environment by minimizing waste generation, preventing the release of millions of tons of hazardous wastes, and cleaning up land and water. Authorized states conduct the direct implementation of permitting, corrective action, and enforcement components of the RCRA Hazardous Waste Management Program.

This grant funding supports all 50 states and six territories. Currently, 48 states and two territories are authorized to implement the RCRA Program. EPA directly implements the RCRA Program in the states of Iowa and Alaska, and in Indian Country. EPA also provides project specific small grants to tribes selected through a competitive process. To ensure statutory requirements are successful, EPA partners with state and local governments, as well as American businesses and non-governmental organizations, to significantly improve waste and material management practices. In FY 2023, EPA will continue a multi-year transition to an updated allocation formula to distribute Hazardous Waste Financial Assistance Grants to the states. The Agency believes that using the most recent data will better align cooperative agreement funding to states needs and maximize the environmental benefits and program performance of this funding. EPA worked in close consultation with the states during the development of the updated allocation formula and began implementation in FY 2021.

Federal investment is needed in the U.S. recycling system. The U.S. solid waste management infrastructure is struggling to maintain pace with rapidly evolving waste streams, leading to inefficient use of domestic resources. Recycling is an important part of a circular economy, which refers to a system of activities that enables resources to maintain their highest values and designs out waste. A circular economy approach provides direct, measurable reductions in greenhouse gas emissions as resource extraction and processing make up approximately 50 percent of the total global greenhouse gas emissions. Improving and enhancing recycling infrastructure will reduce impacts from materials extraction and production on climate, address disproportionate impacts of mismanagement of wastes on overburdened communities, create jobs, and provide feedstock for the manufacturing sector to produce essential products. Recognizing the importance of these

⁶⁵⁵ U.N. Environment International Resource Panel, Global Resources Outlook, 2019, p. 8.

activities, the Infrastructure Investment and Jobs Act (IIJA), enacted on November 15, 2021,⁶⁵⁶ provided funding for grants under section 302(a) of the Save Our Seas 2.0 Act as well as education and outreach grants focused on improving material recycling, recovery, and management.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.2, Reduce Waste and Prevent Environmental Contamination in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA requests a \$6.7 million increase to further support our state and territorial partners with minimizing waste generation and preventing its release into communities. This investment will assist our partners to achieve progress on the ground. EPA also will continue implementing a new grant program focused on improving solid waste management infrastructure and post-consumer materials management. The Solid Waste Infrastructure for Recycling (SWIFR) Program will help reduce waste, reduce greenhouse emissions, and create jobs. As with EPA's FY 2022 Congressional Justification, the Agency requests a \$10 million increase in the STAG appropriation as a line-item for this program in FY 2023.

In FY 2023, the Agency (and authorized states) will continue to:

- Issue and renew permits to a portion of the 1,300 permitted hazardous waste treatment, storage, and disposal facilities. This includes working with industry, the public, and states to address issues related to management of hazardous waste through development and application of standards, permits, guidance, and training. In FY 2021, EPA and its state partners achieved 130 permit renewals issued at hazardous waste facilities.
- Process permit modifications to keep pace with evolving business practices, technology, market conditions, and cleanup decisions.
- Update controls to encourage facilities to modernize technological systems, expand waste management capability, improve hazardous waste management practices, and make timely cleanup decisions.
- Inspect facilities to ensure compliance and safety.
- Oversee cleanups at hazardous waste management facilities and focus on completing cleanup of the 3,924 priority contaminated facilities (the Corrective Action Progress Track), which include highly contaminated and technically challenging sites.
- Oversee cleanups at high priority contaminated hazardous waste management facilities and return cleaned up property to productive use. This includes working with state partners to ensure that responsible parties conduct effective and efficient cleanups that are protective of human health and the environment and reduce the burden on taxpayers.

⁶⁵⁶ For more information, please refer to: https://www.congress.gov/117/plaws/publ58/PLAW-117publ58.pdf.

- Draft implementation documents such as permits and orders, review site assessment plans and results, review remedy selection documents, oversee remedy implementation, oversee public participation, and track progress of cleanups.
- Work with tribes to develop tribal hazardous waste management plans; implement hazardous and universal waste tribal programs; and develop and implement program enforcement policies and procedures for tribes through the Tribal Hazardous Waste Grant Program.
- Continue to improve cleanup approaches, share best practices and cleanup innovations⁶⁵⁷ and address issues of emerging science.
- Distribute grant funds to assist states in adopting new permit programs for the management of coal combustion residuals.
- Make progress in updating permits to reflect current standards, technologies, and practices.
 This includes progress towards meeting the Agency's goal of increasing the percentage of
 permits that are kept up to date. EPA continues to assess and respond to permitting program
 needs, which states and regions can adopt for greater permitting program efficiency.
- Continue implementing a grant program focused on improving solid waste management infrastructure and post-consumer materials management. The Solid Waste Infrastructure for Recycling (SWIFR) recycling program will help reduce waste, reduce greenhouse emissions, and create jobs

Performance Measure Targets:

Work under this program supports performance results in the RCRA Corrective Action Program under the EPM appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$6,747.0) This program increase supports implementing state and territorial partners with minimizing waste generation and preventing its release into communities. This investment will assist EPA's partners to achieve progress on the ground.
- (+\$10,000.0) This program increase supports the Solid Waste Infrastructure for Recycling grant program and will build upon the resources provided in IIJA.

⁶⁵⁷ For more information, please refer to: https://www.epa.gov/hw/toolbox-corrective-action-resource-conservation-and-recovery-act-facilities-investigation-remedy.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act § 3011; Consolidated Appropriations Act, 2022, Pub. L. 117-103. Save our Seas 2.0, 2020, Pub. L. 116-224.

Categorical Grant: Lead

Program Area: Categorical Grants Goal: Ensure Safety of Chemicals for People and the Environment Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$15,895	\$14,275	\$24,639	\$10,364
Total Budget Authority	\$15,895	\$14,275	\$24,639	\$10,364

Program Project Description:

Lead is highly toxic, especially to young children. Exposure to lead is associated with decreased intelligence, impaired neurobehavioral development, decreased stature and growth, and impaired hearing acuity. According to the Centers for Disease Control and Prevention, no safe blood lead level in children has been identified, and effects of lead exposure cannot be corrected. Reducing exposure to lead-based paint (LBP) in old housing continues to offer the potential to significantly decrease blood lead levels in the largest number of children. Housing units constructed before 1950 are most likely to contain LBP. The most recent national survey estimated that 37.1 million homes in the U.S. have LBP, and 23.2 million homes have significant LBP hazards. Children living at or below the poverty line who live in older housing are at greatest risk. Additionally, children of some racial and ethnic groups and those living in older housing are disproportionately affected. Accordingly, the Lead Categorical Grants Program and related Lead Risk Reduction Program represent strategic opportunities to advance EPA's environmental justice (EJ) goals.

Because of these historic and persistent disproportional vulnerabilities of certain racial, ethnic, and low-income communities to LBP, this program has the potential to create significant EJ gains. EPA's Lead Program contributes to the goal of reducing lead exposure and works toward addressing historic and persistent disproportional vulnerabilities of certain racial, ethnic and low-income communities.⁶⁶²

⁶⁵⁸ Centers for Disease Control and Prevention, Blood Lead Levels in Children, found at: http://www.cdc.gov/nceh/lead/prevention/blood-lead-levels.htm.

⁶⁵⁹ Among children ages 1 to 5 years in families with incomes below poverty level, the 95th percentile blood lead was 3.0 μg/dL, and among those in families at or above the poverty level, it was 2.1 μg/dL, a difference that was statistically significant. The 95th percentile blood lead level among all children ages 1 to 5 years was 2.5 μg/dL. The 95th percentile blood lead level in Black non-Hispanic children ages 1 to 5 years was 3.0 μg/dL, compared with 2.4 μg/dL for White non-Hispanic children, 1.8 μg/dL for Mexican-American children, and 2.7 μg/dL for children of "All Other Races/Ethnicities." The differences in 95th percentile blood lead levels between race/ethnicity groups were all statistically significant, after accounting for differences by age, sex, and income. See, America's Children and the Environment (EPA, 2019), found at:

https://www.epa.gov/americaschildrenenvironment.
660 HUD. (2011). American Healthy Homes Survey, Lead and Arsenic Findings.
https://www.hud.gov/sites/documents/AHHS REPORT.PDF.

^{661 &}lt;u>See</u>, America's Children and the Environment (EPA, 2019), found at: https://www.epa.gov/americaschildrenenvironment.
662 Childhood blood lead levels (BLL) have declined substantially since the 1970s, due largely to the phasing out of lead in gasoline and to the reduction in the number of homes with lead-based paint hazards. The median concentration of lead in the

This program will play an important role in achieving the Administration's goals to enhance EJ and equity, by:

- Establishing standards governing lead hazard identification and abatement practices;
- Establishing and maintaining a national pool of certified firms and individuals who are trained to carry out lead hazard identification and abatement practices and/or renovation, repair, and painting projects while adhering to the lead-safe work practice standards and minimizing lead dust hazards created in such projects; and
- Providing information and outreach to housing occupants and the public so they can make informed decisions and take actions about lead hazards in their homes.

The Lead Categorical Grant Program contributes to the Lead Risk Reduction Program's goals by providing support to authorized state and tribal programs that administer training and certification programs for lead professionals and renovation contractors. Ensuring that those who undertake LBP activities are properly trained and certified is a critical aspect of federal efforts to reduce lead exposure and work towards addressing the historic and persistent disproportional vulnerabilities of certain racial groups and low-income communities. Low-income, minority children are disproportionally vulnerable to lead exposure and therefore this program, as well as others that focus on reducing environmental lead levels, have the potential to create significant EJ gains.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the FY 2022 – 2026 EPA Strategic Plan.

In FY 2023, the Lead Categorical Grants Program will continue to provide assistance to states, territories, the District of Columbia, and tribes to develop and to implement authorized lead-based paint abatement programs and authorized Renovation, Repair, and Painting (RRP) programs. EPA directly implements these programs in all areas of the country that are not authorized to do so and will continue to operate the Federal Lead-based Paint Program Database (FLPP) of trained and certified lead-based paint professionals.⁶⁶⁴ Activities conducted as part of this Program include accrediting training programs, certifying individuals and firms, and providing education and compliance assistance to those subject to the abatement and RRP regulations and the Public in support of the Administration's goals to enhance EJ and advance racial equity.

As of February 2022, 39 states and territories, 4 tribes, the District of Columbia, and Puerto Rico have been authorized to run the LBP abatement program. In addition, 14 states and 1 tribe are authorized to administer the RRP program. As of January 2022, there were 308 accredited RRP providers and more than 55 thousand certified renovation firms. In FY 2023, the Agency requests an increase of \$10.3 million to the Lead Categorical Grant Program in addition to continue

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blood of children aged 1 to 5 years dropped from 15 micrograms per deciliter in 1976–1980 to 0.7 micrograms per deciliter in 2013–2014, a decrease of 95%. <u>See</u>, America's Children and the Environment (EPA, 2019), found at: https://www.epa.gov/americaschildrenenvironment.

⁶⁶³ Please visit http://www.epa.gov/lead for additional information.

⁶⁶⁴ Please visit https://cfpub.epa.gov/flpp/pub/index.cfm?do=main.firmSearch for additional information.

providing assistance to existing authorized state and tribal lead programs. Additional resources will support states and tribes in development of authorized LBP programs.

With additional funding EPA also will initiate work to modernize the FLPP database. The current iteration of the FLPP database was developed nearly 15 years ago, so a modernization effort will update the data system to take advantage of up-to-date programming and design tools. Some elements of the current system rely on programming tools that are out of date and require expertise from system programmers that is no longer commonly available. In the past, these updates have been done on a piecemeal basis, so additional resources will allow a comprehensive system-wide update. This will lead to decreased cost of system maintenance, increased system reliability, and improved user experience.

As part of its implementation activities, EPA conducts outreach to the regulated community and the public to increase demand for RRP-certified firms and individuals as well as their actual number. With additional resources, EPA will expand its outreach efforts with the goal of increasing the number of renovations being performed by trained and certified individuals and firms following lead-safe work practices, reducing exposure to lead. EPA will produce public service video and audio announcements (PSAs) in English and Spanish aimed at reaching contractors and the public, emphasizing the critical role contractors play in preventing lead exposure during RRP activities and the importance of using certified contractors for renovations. EPA also will expand its outreach to include older homeowners, a fast-growing number of whom are renovating their homes for the purposes of aging in place. This messaging will focus on the importance of hiring certified contractors when renovating pre-1978 homes, for the safety of residents and of those who visit their homes, including children.

The Agency will further its work in reaching contractors and the public in underserved communities through the "Enhancing Lead-Safe Work Practices through Education and Outreach" initiative. To communicate with homeowners more effectively in these communities, EPA will work directly with local environmental justice organizations that are well-positioned to amplify and expand its reach in the identified communities.

Performance Measure Targets:

Work under this program supports performance results in the Toxic Substances: Lead Risk Reduction Program under the EPM appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$10,364.0) This program change increases funding to support EPA's state and tribal partners with resources to run programs that develop and implement authorized lead-based paint (LBP) abatement programs, authorized Renovation, Repair, and Painting (RRP) programs, and lead poisoning programs.

Statutory Authority:

Toxic Substances Control Act (TSCA), §§ 401-412.

Categorical Grant: Multipurpose Grants

Program Area: Categorical Grants Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$14,297		\$10,200	\$200
Total Budget Authority	\$14,297	\$10,000	\$10,200	\$200

Program Project Description:

EPA and its partners have made enormous progress in protecting air, water, and land resources. The Multipurpose Grants Program supports states, tribes, and territories in the implementation of environmental programs which are mandatory statutory duties delegated by EPA under pertinent environmental laws. Recognizing that environmental challenges differ across tribes, states, and territories, including climate change factors and environmental justice considerations, the Program provides EPA's partners with flexibility to target funds to their highest priority efforts to protect human health and the environment.

FY 2023 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, these funds will support the President's and Administrator's priorities as well as implementation of environmental programs delegated by EPA under pertinent environmental laws. Tribes, states, and territories have the flexibility to apply the funds toward activities required in a broad array of environmental statutes, depending on local needs and priorities. Results are tracked as required by the Environmental Results Order and support critical work across multiple environmental programs.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$200.0) This program change is an increase in resources for EPA's state and tribal partners to continue to advance key environmental priorities in their communities.

Statutory Authority:

Consolidated Appropriations Act, 2022, Pub. L. 117-103; Indian Environmental General Assistance Program Act (GAP); Pollution Prevention Act (PPA); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Clean Air Act (CAA); Toxic Substances Control Act (TSCA); National Environmental Policy Act (NEPA); Clean Water Act (CWA); Safe Drinking Water Act (SDWA); Resource Conservation and Recovery Act (RCRA); Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); Marine Protection Research and Sanctuaries Act (MPRSA); and Indoor Radon Abatement Act.

Categorical Grant: Nonpoint Source (Sec. 319)

Program Area: Categorical Grants Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$180,139	\$177,000	\$188,999	\$11,999
Total Budget Authority	\$180,139	\$177,000	\$188,999	\$11,999

Program Project Description:

Section 319 of the Clean Water Act (CWA) broadly authorizes states, territories, and tribes to use a range of tools to implement their Nonpoint Source Programs, including: regulatory and non-regulatory programs, technical assistance, financial assistance, education, training, technology transfers, and demonstration projects. Nonpoint source pollution, caused by runoff that carries excess nutrients, toxics, and other contaminants to waterbodies is the greatest remaining threat to surface and groundwater quality impairments in the United States. Climate change is increasing this form of pollution by causing more frequent and intense rain and storm events. As of FY 2022, the current number of impaired waters is 135,040. NPS pollution is the predominant cause of water quality problems in the Nation.

Grants under Section 319 are provided to states, territories, and tribes to help them implement their EPA-approved Nonpoint Source Management Programs by remediating past nonpoint source pollution and preventing or minimizing new nonpoint source pollution. Implementation of watershed-based plans helps states achieve load reductions contained in Total Maximum Daily Loads to achieve water quality standards.

Since 2006, Section 319 implementation projects have allowed states to remediate over 950 nonpoint source water quality impairments so that waterbodies now meet water quality standards or have documented progress towards standards. EPA oversees implementation of these program enhancements and provides technical assistance to support state and tribal nonpoint source programs. To further accelerate the reduction of nonpoint source pollution, EPA and the U.S. Department of Agriculture (USDA) continue to enhance coordination to achieve improvements in water quality via the National Water Quality Initiative. The Initiative targets resources and helps landowners implement practices to control nutrient, pathogen, and sediment pollution in over 300 small watersheds nationwide.

⁶⁶⁵ For more information see: https://sam.gov/fal/7798fced15e14aa6bf9f67d6d10b95e0/view.

^{666 &}quot;Of all the waterbodies across the nation that have been assessed and a possible source of impairment identified, 85 percent of rivers and streams and 80 percent of lakes and reservoirs are polluted by nonpoint sources." (USEPA, 2016) https://www.epa.gov/sites/default/files/2016-10/documents/nps_program_highlights_report-508.pdf

The pervasiveness and widely distributed nature of nonpoint source pollution requires cooperation and involvement from a wide range of stakeholders to address it, including EPA, other federal agencies, states, tribes, local governments, nonprofit organizations, conservation districts, and private landowners. EPA will work closely with and support the many efforts of states, interstate agencies, tribes, local governments and communities, watershed groups, USDA, Department of Homeland Security's Federal Emergency Management Agency (FEMA), and other federal agencies to develop and implement programs and local watershed projects to restore surface water and groundwater nationwide. EPA provides grant funds to states and over 200 tribes under Section 319 to implement programs to control nonpoint pollution, including reduction of nitrogen, phosphorus, and sediment loadings. In 2020, Section 319 grants eliminated 45.5 million pounds of nitrogen, 1.9 million pounds of phosphorus, and 1.7 million tons of sediment from waters.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2023, the Program will continue to work with states and tribes to strengthen and enhance their nonpoint source programs. The Section 319 grants will continue to focus on watershed project implementation and maintaining current Nonpoint Source Management Programs to restore impaired waterbodies to meet water quality standards and protect unimpaired waters. It has been demonstrated repeatedly that achieving water quality results requires targeting the primary sources of nonpoint source pollution in a watershed in the right places with the right practices. Watershed-based plans enable this targeting by:

- providing an analysis of sources and relative significance of pollutants of concern;
- identifying cost-effective techniques to address those sources;
- assessing the availability of needed resources, authorities, and community involvement to affect change; and
- enabling monitoring to evaluate nonpoint sources and flows.

Taken together, this information enables states, tribes, and local communities to track progress and make changes over time to meet their water quality goals.

EPA will continue to forge and strengthen strategic partnerships with other federal agency programs. The Agency will focus on our partnership with the USDA Natural Resources Conservation Service (NRCS), which implements Farm Bill conservation programs that can help control nonpoint source pollution. Agricultural sources of pollution in the form of animal waste, fertilizer, and sediments have a particularly profound effect on water quality. In FY 2023, EPA will continue the National Water Quality Initiative partnership with USDA to focus federal resources on agricultural sources of pollution in select watersheds in every state. EPA will encourage states to increase their use of Clean Water Act State Revolving Loan Funds to support projects that reduce nonpoint source pollution.

To address urban and suburban sources of nonpoint source pollution, EPA will continue to work closely with a broad set of partners to promote the implementation of low-impact development practices (also called green infrastructure). Low-impact development practices, such as rain gardens and permeable pavement, improve climate resiliency and reduce harm to water quality by reducing peak flows during storms, filtering pollutants, and recharging groundwater. Low-impact development practices also may produce co-benefits by mitigating the impacts of natural hazards including flood and drought. Working with states, cities, developers, watershed associations, and federal agencies such as FEMA with an interest in flood protection and floodplain management, EPA will continue to spread knowledge and adoption of low-impact development practices. From FY 2017-2019, EPA funded a series of pilot projects across nine EPA regions that explored how water quality programs may collaborate with FEMA partners to integrate low-impact development in state and local FEMA Hazard Mitigation Plans. EPA also has developed a set of training materials that provide technical, programmatic, and funding guidance for water quality programs interested in engaging in the Hazard Mitigation planning process. In FY 2023, EPA intends to finalize these training materials and synthesize lessons learned from the pilot projects to include in a training curriculum that can be shared broadly.

The Section 319 Program also recognizes the importance of environmental justice (EJ) and is exploring the role that the Program may play in expanding the investments in pollution reduction projects that have multiple benefits to communities. In FY 2023, EPA will assess how to integrate climate and EJ priorities, particularly with regards to the Program's resilience/hazard mitigation priorities. The Program also will amplify current efforts in regional and state programs to address nonpoint sources in communities burdened with multiple sources of pollution.

One Water/One Community: EPA will coordinate CWA and Safe Drinking Water Act investments toward historically underserved and overburdened communities that are facing greater climate and water equity challenges to achieve greater resilience, access to clean and safe water, and an improved quality of life. This program will provide holistic support to communities as they respond to the climate crisis by increasing funding for planning and implementation actions across the country. Additionally, EPA will work with tribes to meet the unique needs of their communities.

Performance Measure Targets:

(PM SWP-01) Annual increase in square miles of watersheds with surface water meeting standards that previously did not meet standards.	FY 2022 Target	FY 2023 Target
	8,000	5,000
(PM SWP-02) Annual increase in square miles of watersheds with previously impaired surface waters due to nutrients that now meet standards for nutrients.	FY 2022 Target 2,100	FY 2023 Target 1,400

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$6,999.0) This program change is an increase in resources to support coordinated community assistance work in support of the One Water/One Community initiative.
- (+\$5,000.0) This program change is an increase of resources to support state nonpoint source programs, including implementation of nonpoint source projects and statewide nonpoint source protection activities.

Statutory Authority:

Clean Water Act, § 319.

Categorical Grant: Pesticides Enforcement

Program Area: Categorical Grants Goal: Enforce Environmental Laws and Ensure Compliance Objective(s): Detect Violations and Promote Compliance

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$24,321	\$24,000	\$25,580	\$1,580
Total Budget Authority	\$24,321	\$24,000	\$25,580	\$1,580

Program Project Description:

The Pesticides Compliance Monitoring and Enforcement Cooperative Agreement Program supports pesticide product and user compliance with provisions of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through cooperative agreements 667 with states and tribes.

The cooperative agreements: support state and tribal compliance and enforcement activities under FIFRA; provide resources to rebuild programmatic capabilities between EPA and partner agencies; provide vital training programs to EPA, state, territory, and tribal partners; and help address environmental justice concerns in overburdened and vulnerable communities. Enforcement and pesticides program cooperative agreement guidance is issued to focus regional, state, and tribal efforts on the highest priorities. EPA's support to state and tribal pesticide programs ⁶⁶⁸ emphasizes reducing chemical risks by ensuring compliance with worker protection standards, pesticide applicator certification and training requirements, pesticide use requirements designed to protect water quality, pesticide product integrity, and border compliance.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Detect Violations and Promote Compliance in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Agency requests an additional \$1.58 million to support EPA's state and tribal partners through the Pesticides Enforcement Grants Program. In addition to maintaining a basic level of pesticide program implementation, compliance assistance, and enforcement to ensure a viable pesticide regulatory and enforcement program, there are four possible focus areas including: 1) prevent or reduce incidents resulting from fumigation exposures; 2) reduce spray drift incidents by increasing awareness and adoption of spray drift reduction techniques and technologies; 3) support tribal pesticide program capacity building and efficient use of state resources; and 4) minimize pesticide risk while protecting human health from emerging public health issues. In FY

667 For additional information, please refer to: http://www2.epa.gov/compliance/federal-insecticide-fungicide-and-rodenticide-act-state-and-tribal-assistance-grant.

668 For additional information, please refer to: <a href="http://www2.epa.gov/pesticide-advisory-committees-and-regulatory-committees-and-r

⁶⁶⁸ For additional information, please refer to: http://www2.epa.gov/pesticide-advisory-committees-and-regulatory-partners/tribal-pesticide-programs.

2023, EPA will prioritize and award state and tribal pesticides cooperative agreements for implementing the compliance monitoring and enforcement provisions of FIFRA.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$1,580.0) This program change is an increase to help build environmental partnerships with states and tribes that strengthen their ability to address environmental and public health threats from pesticides. Specifically, this investment will rebuild programmatic capabilities between EPA and partner agencies; provide vital laboratory capacity, training programs to EPA, state, territory, and tribal partners; and help address environmental justice concerns in overburdened, underserved, and vulnerable communities.

Statutory Authority:

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) §23(a)(1); Consolidated Appropriations Act, 2022, Pub. L. 117-103.

Categorical Grant: Pesticides Program Implementation

Program Area: Categorical Grants Goal: Ensure Safety of Chemicals for People and the Environment Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$12,148	\$12,294	\$14,027	\$1,733
Total Budget Authority	\$12,148	\$12,294	\$14,027	\$1,733

Program Project Description:

The purpose of EPA's pesticide program implementation grants is to translate pesticide regulatory decisions made at the national level into results at the local level. Under the pesticide statutes, responsibility for ensuring proper pesticide use is in large part delegated to states, territories, and tribes. Grant resources allow our co-regulators to be more effective regulatory partners, serving all populations and enabling our partners to prioritize incorporating environmental justice into their pesticide programs. In FY 2023, EPA will work with states, tribes and territories to incorporate environmental justice (EJ) principles into their programs.

EPA's mission, as related to pesticides, is to protect human health and the environment from pesticide risk and to realize the value of pesticide availability by considering the economic, social, and environmental costs and benefits of pesticide use. The Agency provides grants to states, tribes, and other partners, including universities, non-profit organizations, other federal agencies, pesticide users, and environmental groups, to assist in strengthening and implementing EPA pesticide programs. This grant program focuses on EJ issues such as: worker safety activities, including protection of farmworkers outreach and education in tribal communities about pesticide risks; pesticide safety education in vulnerable communities with limited English language proficiency; and certification and training of pesticide applicators. The Program also focuses on protecting endangered species, protecting water resources from pesticides, protecting pollinators, and promoting environmental stewardship and Integrated Pest Management (IPM)-related activities in community settings, such as preschools in vulnerable communities and tribal schools, which are traditionally underserved and typically have EJ concerns.

EPA supports implementation of tribal pesticide programs through cooperative agreements that help tribes protect human health by reducing pesticidal risks in tribal communities. Many tribal communities are small and located in remote areas with few resources to address EJ issues. The

⁶⁶⁹ Federal Insecticide, Fungicide and Rodenticide Act, as amended. Section 3(a), Requirement of Registration (7 U.S.C. 136a). Available online at: https://www.epa.gov/laws-regulations/summary-federal-insecticide-fungicide-and-rodenticide-act.

⁶⁷⁰ A large portion of these stakeholders also may be members of communities with EJ concerns.

⁶⁷¹ A large portion of these stakeholders also may be members of communities with EJ concerns.

⁶⁷² The Endangered Species Act of 1973 sections 7(a)1 and 7(a)2; Federal Agency Actions and Consultations, as amended (16 U.S.C. 1536(a)). Available at the U.S. Fish and Wildlife Service's Endangered Species Act of 1973 (ESA) internet site: https://www.fws.gov/service/section-7-consultations.

Program is implemented in a manner that recognizes that tribes have unique needs as an underserved population, and that certain aspects of Native American lifestyles, such as subsistence fishing or consumption of plants that were not grown as food and possibly exposed to pesticides, may increase exposure to some chemicals or create unique chemical exposure scenarios. ⁶⁷³ These cooperative agreements with our co-regulators also can provide pesticide safety education to migrant farmworkers and their families and communities.

To further these efforts, EPA funds a multi-year cooperative agreement with Colorado State University called the Pesticide Regulatory Education Program (PREP), which provides targeted training to states, tribes, and territories. This program is specifically requested by EPA's pesticide co-regulators and governed by a PREP Steering Committee, which includes the Association of American Pesticide Control Officials (AAPCO) Board of Directors and EPA. The PREP Steering Committee will meet in October 2022 to identify ways to be more inclusive of vulnerable communities and address more EJ issues.

The Agency also funds a multiyear grant in support of the State Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Issues Research and Evaluation Group (SFIREG). The grant ensures the close coordination of states and EPA on pesticide issues.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the FY 2022 – 2026 EPA Strategic Plan.

In FY 2023, EPA requests an increase of nearly \$1.5 million to pesticide program implementation grants. The additional resources will support state efforts on applicator certification and worker safety activities, particularly in vulnerable and limited English language speaking communities, and increase funding for territories and tribes. EPA will continue to implement the following programs:

Agricultural Worker Protection Standard and Certification and Training Program

Through the Certification and Training Program and the Agricultural Worker Protection Standard, EPA protects workers, pesticide applicators and handlers, employers, and the public from the potential risks of pesticides at their work. This effort protects farmworkers, their families, and their communities, all of which are often located in areas with many EJ concerns. EPA will continue to provide assistance and grants to implement these programs, and to address their respective federal regulatory changes. In FY 2020, states, territories, and tribes (certifying authorities) submitted their revised certification plans to EPA for review to address the 2017 revisions to the Certification of Pesticide Applicators rule. In FY 2020 through FY 2022, EPA reviewed the proposed changes to the certification plans, working with these certifying authorities to refine and modify their proposed plans as needed. In FY 2023, EPA will focus on finalizing the remainder of draft plans and supporting the implementation of the approved plans. Certifying authorities will be implementing approved plans according to the timelines outlined in the plans. Some certifying

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⁶⁷³ For additional information, please visit: http://www.epa.gov/pesticide-advisory-committees-and-regulatory-partners/tribal-pesticide-programs.

authorities began regulatory and program changes in FY 2021 and FY 2022 to start implementing their revised plans even before final approval. In FY 2023, to protect agricultural workers, states, territories, and tribes will continue to train their program and inspection staff on the 2015 final revisions to the Agricultural Worker Protection Standard, conduct outreach and compliance assistance for communities with environmental justice concerns, and enforce the rule. 674

Endangered Species Protection Program

The Endangered Species Protection Program protects federally threatened and endangered animals and plants impacted by pesticide use. The Endangered Species Act (ESA) mandates that federal actions will not jeopardize the continued existence of ESA-listed species or destroy or adversely modify their designated critical habitat. EPA also will provide grants to states and tribes, as described above, for projects supporting endangered species protection. Program implementation includes outreach, communication, education related to pesticide use limitations, review and distribution of endangered species protection bulletins, and evaluating potential risks to ESA-listed species from pesticides and initiating ESA consultation with the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) (aka "The Services") when appropriate. In FY 2023, these activities will continue to support the Agency's mission to protect the environment from pesticide risk and comply with the ESA for FIFRA actions.

Protection of Water Sources from Pesticide Exposure

Protecting the Nation's water sources from possible pesticide contamination is an important component of EPA's environmental protection efforts. In FY 2023, EPA will continue to provide funding, through cooperative agreements, to states, tribes, and other partners to investigate and respond as needed to address pesticide contamination of water resources, particularly in vulnerable communities with EJ concerns. Stakeholders and partners, including states and tribes, are expected to evaluate local pesticide uses that could contaminate water resources and take steps to prevent or reduce contamination where pesticide concentrations approach or exceed levels of concern. In FY 2023, EPA will work with co-regulators to determine the best methods for identifying and addressing possible pesticide contamination in vulnerable and underserved communities.

Integrated Pest Management (IPM)

EPA will continue to support risk reduction by promoting the use of safer alternatives to traditional chemical pesticides, including through IPM techniques.⁶⁷⁶ EPA supports the development and evaluation of new pest management technologies that contribute to reducing both human health and environmental risks from pesticide use. For FY 2023, the Program's National Program Guidance will continue to require all regions to implement at least one IPM project with an EJ focus.⁶⁷⁷ In addition, the Program will be reviewing the FIFRA Cooperative Agreement Guidance to identify program areas that can be expanded to include more EJ work. Examples of this include:

⁶⁷⁴ For additional information, please visit: https://www.epa.gov/pesticide-worker-safety/how-epa-protects-workers-pesticide-risk.
675 For additional information, please visit: https://www.epa.gov/endangered-species/about-endangered-species-protection-program.

⁶⁷⁶ For additional information, please visit: http://www.epa.gov/pesp/.

⁶⁷⁷ Most regional programs are already implementing their own EJ efforts, which incorporate pesticide safety.

pollinator habitat protection on tribal lands and overburdened and underserved communities, and bed bug education in underserved populations and communities with EJ concerns.

The Pesticide Environmental Stewardship Program (PESP) is an EPA partnership program that works with the Nation's pesticide-user community to promote IPM practices. PESP is guided by the principle that partnership programs complement the standards and decisions established by regulatory and registration actions. In FY 2023, resources will be focused on funding projects across the country that promote IPM and reduce the impacts of pesticide use in agricultural settings. Selected projects could address pesticide use in rural areas or on tribal lands, promoting IPM practices that reduce risk and that benefit these and other overburdened and disadvantaged communities.

Pollinator Health

EPA will continue to work with state and tribal agencies to develop and implement local plans to help improve pollinator health. State pollinator protection plans in several states have been an effective communication and collaboration mechanism between stakeholders at the local level that can lead to reduced pesticide exposure and protection of honeybees, while maintaining the flexibility needed by growers to use pesticides. EPA believes that these plans, developed through a robust stakeholder engagement process at the local level, serve as good models for enhanced local communication and can help accomplish the Agency's goal of mitigating exposure of bees to acutely toxic pesticides. In FY 2023, EPA will continue to engage with the Tribal Pesticide Program Council (TPPC) Pollinator Protection Workgroup to better understand specific pollinator protection challenges for tribes, a traditionally underserved population with many EJ concerns. In addition, EPA regions will assist their states, tribes, and territories with their pollinator protection plans and efforts as needed.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$1,487.0) This program change will support state efforts to focus on worker safety activities, vulnerable and limited English language-speaking communities, and increasing grant presence in territories and tribes.
- (+\$246.0) This program change will support two additional tribal FIFRA cooperative agreements and provide additional resources for states and territories to carry out pesticide program implementation work to protect farmworkers.

⁶⁷⁸ Tribal concerns include, but are not limited to, potential impacts to pollinator habitat from climate change.

Statutory Authority:

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) § 23(a)(1); Federal Food, Drug and Cosmetic Act (FFDCA); Food Quality Protection Act (FQPA) of 1996; Endangered Species Act (ESA).

Categorical Grant: Pollution Control (Sec. 106)

Program Area: Categorical Grants Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$227,741	\$230,000	\$251,538	\$21,538
Total Budget Authority	\$227,741	\$230,000	\$251,538	\$21,538

Program Project Description:

Section 106 of the Clean Water Act (CWA) authorizes EPA to provide federal assistance to states, territories, the District of Columbia, tribes, and interstate agencies to establish and maintain adequate programs for the prevention and control of surface and groundwater pollution from point and nonpoint sources. Activities supported through these grants include: conducting ambient water quality monitoring; assessing and listing impaired waters; and developing water quality standards and Total Maximum Daily Loads (TMDLs), surveillance, and enforcement.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

The Section 106 Program funds state, interstate and tribal water pollution control programs and is a critical funding source to establish, expand, and implement water quality programs to protect and restore water resources, including rivers, streams, lakes, wetlands, and groundwater. Over the last 10 years, the Program has seen an increase in challenges faced by states and tribes such as severe weather events, fires, and harmful algal blooms. In FY 2023, EPA requests an additional \$21.5 million in Section 106 investment funding to strengthen the base state, interstate, and Tribal programs. This increase also will support state and tribal efforts to understand and mitigate climate change and support equity and environmental justice. An increase in funding will result in restoring lost capacity through hiring and training of water quality staff, expanding program activities such as ambient water quality monitoring and assessment, water quality standards (WOS) and TMDL implementation and permitting and enforcement, and protecting water resources. Within the core Section 106 funds described above, Tribes will receive an additional \$1.538 million to implement the revised CWA Section 106 Tribal guidance to: develop and strengthen capacity, hire, and train staff, expand water quality monitoring, strengthen water quality assessments and electronic reporting, expand participation in the Assessment Total Maximum Daily Load Tracking and Implementation System (ATTAINS) pilot, and expand CWA program authorities.

⁶⁷⁹ The District of Columbia is eligible for 106 funds. A tribe must be eligible under Section 518(e) in the CWA.

Monitoring and Assessment

EPA is working with states and tribes to provide monitoring and assessment information to support multiple CWA programs in a cost-efficient and effective manner. The intent is to have the scientifically defensible monitoring data that are needed to address priority problems at state, tribal, national, and local levels and to track water quality changes over time.

In FY 2023, EPA will continue working with states and tribes to support and enhance their water quality monitoring programs. Monitoring Initiative funds for states and tribes will support their participation in the National Aquatic Resource Surveys (NARS) and their enhancement of state and tribal monitoring programs. The Monitoring Initiative will be funded at \$18.5 million to support participation in the NARS and for monitoring program priority enhancements. The NARS program data is used to report on the condition of the Nation's waters.

Through the Monitoring and Assessment Partnership, EPA will continue working with states and tribes to develop and apply innovative and efficient monitoring tools and techniques to optimize availability of high-quality data to support priority CWA program needs. EPA also will continue working with states to support their water quality assessment programs, including helping to assure timely submission of state Integrated Reports and 303(d) lists. These lists help inform progress on restoring water quality. In FY 2021, EPA supported states to reduce outstanding state 303(d) lists from 54 to 22. The timeliness of EPA review also has improved. EPA reduced the backlog of EPA action on state-submitted 303(d) lists from 12 at the start of FY 2018 to 1 in FY 2021. From FY 2017 to FY 2021, EPA has supported and acted on more than 140 lists of impaired waters submitted by states under CWA Section 303(d). EPA will continue to work with states to support electronic reporting, including annual reporting of water quality data through the Water Quality Exchange and submission of Integrated Reports through the ATTAINS.

Reviewing and Updating Water Quality Standards

EPA will work with states and authorized tribes as they review and update their water quality standards periodically as required by CWA and EPA regulations in 40 CFR Part 131. EPA will work with tribes that want to establish water quality standards. For its part, EPA will review and work to formally act upon all state and tribal submissions of new and revised water quality standards in accordance with the Agency's statutory obligations and timeline. The Agency also will continue to track progress by states and authorized tribes as they complete triennial reviews of applicable standards on time as required by CWA.

Developing TMDLs

EPA will work with states, territories, and authorized tribes to develop and implement TMDLs for CWA Section 303(d) listed impaired waterbodies as a tool for meeting water quality standards. TMDLs focus on achieving clearly defined environmental standards and restoring waters by identifying the sources of water pollution and using permit requirements, watershed plans, and nonpoint source funds to address impaired waters. EPA will continue to work with states to

⁶⁸⁰ For more information, please see: https://www.epa.gov/water-pollution-control-section-106-grants/monitoring-initiative-grants-under-section-106-clean.

facilitate accurate, comprehensive, and geo-referenced water quality assessment decisions made available to the public via ATTAINS. In addition, EPA will continue to track state progress in completing TMDLs, alternative restoration approaches or projection plans with a goal of 100 percent of priority plans in place at state identified priority waters under the State-EPA 303(d) Program Vision by 2022. EPA is in the process of working with states to develop a new universe of priority TMDLs for FY 2023. As of January 2022, 75 percent of state priority waters were addressed by a priority TMDL, other restoration plan, or protection approach. EPA also is working to ensure timely action by the Agency on TMDLs submitted by states. Numerous recent and long-standing efforts have helped to substantially reduce the backlog on TMDLs from more than 700 in FY 2018 to 4 as of January 2022. Between fiscal year 2017 and January 2022, EPA has supported and approved more than 13,000 TMDLs.

Issuing Permits

The NPDES Program is managed by EPA and the states. On average, the Program issues over 11,000 permits a year to address discharges from among the approximately 15,000 wastewater treatment facilities, more than 60 categories of industries, and almost 300,000 stormwater facilities. The NPDES Program requires point source dischargers of pollutants to waters of the United States to be permitted and pretreatment programs be put in place to control discharges from industrial and other facilities to the Nation's wastewater treatment plants. EPA is working with the states ⁶⁸¹ to identify opportunities to enhance the integrity and timely issuance of NPDES permits, while fine-tune permitting implementation practices. EPA also provides training and technical assistance to permit writers, promotes innovative green infrastructure, and suggests integrated planning approaches to affordably address wet weather challenges. EPA updated the NPDES permit application forms to clarify requirements and has provided training on the revised forms, as well as checklists to increase rates of application completeness. After program improvements, between March 2018 and September 2021, the backlog of EPA-issued new and existing NPDES permits decreased from 106 to 22 and 547 to 284, respectively. EPA issues NPDES permits where states are not authorized to manage the programs.

Conducting Compliance Monitoring and Enforcement

EPA will work with NPDES-authorized states to implement the 2014 CWA NPDES Compliance Monitoring Strategy (CMS).⁶⁸² The NPDES CMS establishes national standards for allocation of inspection resources across all NPDES regulated entities to best protect water quality.

EPA works with states on advanced technologies, such as remote water monitoring sensors to collect discharge data and identify problem areas more efficiently. The Smart Mobile Tools for Field Inspectors software suite provides a digital platform to support inspectors and managers through the entire inspection process – from scheduling an inspection to generating a draft inspection report for management review. The Agency expects that these technologies will improve the analytical capabilities of both EPA and the states and enhance the public's knowledge about the quality of their environment.

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⁶⁸¹ Currently no tribes have authority to implement the NPDES program.

⁶⁸² For more information, please see: https://www.epa.gov/compliance/clean-water-act-national-pollutant-discharge-elimination-system-compliance-monitoring.

Currently, EPA and states are implementing the NPDES Electronic Reporting Rule, NPDES eRule, in a collaborative manner. States have the option to build their own electronic reporting tools and data systems or they can elect to utilize EPA's tools and systems. EPA and states implemented Phase 1 of the NPDES eRule in FY 2017 for the following two reports: 1) Discharge Monitoring Reports and 2) Federal Biosolids Annual Report, where EPA is the regulatory authority. Over 35,000 NPDES permittees in 24 states use EPA's electronic reporting tool, NetDMR, to submit their Discharge Monitoring Reports. EPA and states started implementing Phase 2 of the NPDES eRule in FY 2018 for general permit reports and all remaining program reports. EPA will continue to work collaboratively with states in FY 2023 to ensure a smooth transition to electronic reporting for the NPDES Program. Implementing the NPDES eRule will help improve transparency and ensure permittees submit more accurate, timely, complete, and consistent information.

Working with Tribal Water Pollution Control Programs

In FY 2023, EPA will work with tribal programs to implement the revised CWA Section 106 Tribal Guidance. Tribes will continue to implement and expand their water pollution control programs by conducting activities that address water quality and pollution problems on tribal lands pursuant to CWA Section 518(e).

One Water/One Community

EPA will coordinate CWA and Safe Drinking Water Act investments toward historically underserved and overburdened communities that are facing greater climate and water equity challenges to achieve greater resilience, access to clean and safe water, and an improved quality of life. This program will provide holistic support to communities as they respond to the climate crisis by increasing funding for planning and implementation actions across the country. Additionally, EPA will work with tribes to meet the unique needs of their communities.

Performance Measure Targets:

(PM SWP-01) Annual increase in square miles of watersheds with surface water meeting standards that previously did not meet standards.	FY 2022 Target 8,000	FY 2023 Target 5,000
	0,000	3,000
(PM SWP-02) Annual increase in square miles of watersheds with	FY 2022	FY 2023
previously impaired surface waters due to nutrients that now meet	Target	Target
standards for nutrients.	2,100	1,400
(PM TMDL-02) Percentage of priority TMDLs, alternative restoration	FY 2022	FY 2023
plans, and protection approaches in place.	Target	Target
	100	35

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$1,538.0) This program change is an increase in resources to support coordinated community assistance work with states and tribes in support of the One Water/One Community initiative.
- (+\$20,000.0) This program change is an increase of resources to provide additional resources to states, tribes, and interstate agencies to establish and maintain programs for the prevention and control of surface and groundwater pollution from point and nonpoint sources.

Statutory Authority:

CWA § 106.

Categorical Grant: Pollution Prevention

Program Area: Categorical Grants Goal: Ensure Safety of Chemicals for People and the Environment Objective(s): Promote Pollution Prevention

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$5,022	\$4,630	\$5,775	\$1,145
Total Budget Authority	\$5,022	\$4,630	\$5,775	\$1,145

Program Project Description:

The Pollution Prevention (P2) Categorical Grants Program provides financial support to states, state entities (*i.e.*, colleges and universities), and federally recognized tribes and inter-tribal consortia in implementing the Pollution Prevention Act (PPA) of 1990. The Infrastructure Investment and Jobs Act significantly increases funding for the program for fiscal years 2022–2026.

The P2 Program is one of EPA's primary tools for advancing environmental stewardship and sustainability by federal, state, and tribal governments, businesses, communities, and individuals. The Program seeks to alleviate environmental problems by achieving significant reductions in the generation of hazardous releases to air, water, and land; reductions in the use or inefficient use of hazardous materials; and advancing EPA's chemical risk reduction and management goals. For example, the P2 Program contributes to reductions in the generation of greenhouse gases, reductions in the use of water, and the Agency's environmental justice (EJ) goals. As a result of implementing these preventative approaches, the P2 Program helps businesses and others reduce costs and access market opportunities in their work to support environmental stewardship and other sustainability objectives.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.2, Promote Pollution Prevention in the *FY 2022 – 2026 EPA Strategic Plan*.

The Program's efforts advance the Agency's priorities to pursue sustainability, take action on climate change, address EJ, make a visible difference in overburdened or underserved communities, and ensure chemical safety. ⁶⁸³ In FY 2023, the P2 Categorical Grants ⁶⁸⁴ Program will continue supporting states, state entities, and federally recognized tribes and inter-tribal consortia to provide technical assistance to businesses, particularly small- and medium-sized firms,

⁶⁸³ For additional information about the EPA's P2 program, please visit: http://www.epa.gov/p2/Error! Main Document Only..

⁶⁸⁴ For additional information about the grants themselves, please visit: https://www.epa.gov/p2/grant-programs-pollution-prevention. Categorical Grants fund core P2 technical assistance and are complementary to the P2 Source Reduction Assistance Grants. In FY 2021 there are 42 active P2 Categorical Grants and 11 active P2 Source Reduction Assistance Grants, for a total of 53 grants.

to help them identify, develop and implement cost-effective approaches for reducing or eliminating pollution at the source. Because it is often cheaper to prevent pollution from being created at the source rather than cleaning it up afterwards or to pay for control, treatment, and disposal of waste products, these P2 approaches often result in significant long-term savings for businesses. Documenting best practices and developing case studies and training materials will be foundational assets for amplifying and replicating environmental stewardship, P2, and sustainability successes resulting from the grant programs.

Through competitive grants to states and tribes, U.S. businesses can access a range of P2 enabling tools, information, and support programs. EPA currently has 42 active two-year categorical grants to states and tribes, all of which will continue through FY 2022. With the additional \$1.052 million requested in FY 2023 President's Budget, EPA will be able to increase the number of grants awarded to states and tribes, as well as increase the award size for many of the grant recipients. The result will be increased capacity to provide P2 technical assistance to businesses, particularly in communities with EJ concerns, to help them develop and adopt source reduction practices in their operations, including conformance with and access to EPA Recommended Standards and Ecolabels and the EPA Safer Choice Standards. Between 2011 and 2019, EPA's P2 Program issued 451 assistance grants for \$48.8 million, which helped American businesses identify, develop, and adopt approaches resulting in the following benefits: 706 million pounds of hazardous materials reduced, 40.4 billion gallons of water saved, 16.9 million metric tons of greenhouse gases reduced, and \$1.9 billion dollars in savings for business.

One approach EPA takes to pursue program efficiencies and economies of scale is to use sector focused P2 National Emphasis Areas. For P2 grants awarded in FY 2022 and commenced in FY 2023, grant applicants will continue to be required to focus on one or more National Emphasis Areas, 686 which were selected based on an analysis of data to identify industry sectors that had high environmental impact, high economic importance, high P2 opportunity, and which were of local concern to potential grantees. This approach will be continued in the award of FY 2023 funds.

Performance Measure Targets:

Work under this program supports performance results in the Pollution Prevention Program under the EPM appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$1,145.0) This program change increases support to EPA's state and tribal partners to reduce toxic releases in overburdened and underserved communities and provide technical assistance to businesses to increase access to safer chemical products meeting the EPA's Safer Choice standard.

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⁶⁸⁵ Calculated over a 4-year rolling period to account for the reoccurring benefits the P2 actions provide.

⁶⁸⁶ The P2 National Emphasis Areas include: automobile manufacturing and maintenance, aerospace manufacturing and maintenance, chemical manufacturing and processing, metal manufacturing and fabrication, and/or food and beverage manufacturing or processing.

Statutory Authority:

Pollution Prevention Act of 1990; Toxic Substances Control Act.

Categorical Grant: Public Water System Supervision (PWSS)

Program Area: Categorical Grants Goal: Ensure Clean and Safe Water for All Communities Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

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				FY 2023 President's
		FY 2022	FY 2023	Budget v.
	FY 2021	Annualized	President's	FY 2022 Annualized
	Final Actuals	CR	Budget	CR
State and Tribal Assistance Grants	\$110,341	\$112,000	\$132,566	\$20,566
Total Budget Authority	\$110,341	\$112,000	\$132,566	\$20,566

Program Project Description:

The Public Water System Supervision (PWSS) Program provides grants to states and tribes with primary enforcement authority (primacy) to implement and enforce the National Primary Drinking Water Regulations (NPDWRs) under the Safe Drinking Water Act (SDWA). The NPDWRs set forth health-based standards, monitoring, reporting, sanitary surveys, and enforcement elements to ensure that the Nation's drinking water supplies do not pose health risks. Funds allocated to states and tribes without primacy are used to support direct implementation activities by EPA.

PWSS Program grants support the safety of the Nation's drinking water resources and protect public health and the environment. Rural, small, and disadvantaged communities significantly benefit from support and technical assistance provided by primacy agencies through this vital funding. These systems often struggle to hire and retain qualified operators. Qualified operators are essential to ensure these systems can provide safe water for their customers. PWSS Program grants support the training and certification operators need to continue to protect public health.

Primacy agencies use these grants to fund drinking water program personnel who:

- Provide training and technical assistance to owners and operators of public water systems;
- Conduct sanitary surveys (i.e., reviews to determine and support a utility's capacity to deliver safe drinking water) and address significant deficiencies that may compromise the quality of the finished water;
- Train and certify public water system operators;
- Manage public water system data, facilitate electronic reporting of compliance monitoring data, and submit compliance data to the database of record, the Safe Drinking Water Information System;
- Ensure that public water systems conduct the required public notifications to consumers; and;

• Respond to violations and issue enforcement actions.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*. The Program also will support the Agency's Infrastructure Investment and Jobs Act implementation priorities.

In FY 2023, EPA will provide funds to support state efforts to assist the most vulnerable water systems in:

- meeting drinking water regulations;
- developing the financial and managerial capacity needed to achieve and maintain long-term sustainability and compliance with national safe drinking water regulations; and
- benefitting from federal investments that address aging or inadequate infrastructure (*e.g.*, pipe replacement to prevent failures in distribution systems, installation of treatment to remove drinking water contaminants).

EPA's efforts under this program will help deliver clean drinking water, improve public health, and support environmental justice for overburdened and underserved communities, including rural and tribal communities.

In FY 2023, funding will help states and tribes with primary enforcement authority implement and enforce NPDWRs under the SDWA. Funds allocated to states and tribes without primacy are used to support direct implementation activities by EPA. These funds will assist all communities across the country in the provision of safe drinking water.

EPA's PWSS Program is working with states to reduce the number of systems that have health-based non-compliance events, with a goal of decreasing the number of community water systems out of compliance with health-based standards. EPA has set a goal of reducing the number of community water systems out of compliance with health-based standards to 2,700 from a 2017 baseline of 3,508. As of January 2022, 2,889 of the 3,508 systems with health-based violations on September 30, 2017 have been returned to compliance. The PWSS Program helps to facilitate this effort by supporting state drinking water programs and technical assistance providers in achieving and maintaining compliance at drinking water systems, amplifying best practices, strengthening state capacity, and certifying drinking water operators.

EPA also is strengthening its oversight of the state drinking water programs by improving the scope and consistency of the annual PWSS Program review for each primacy agency that is required by SDWA. Information from these reviews helps ensure that federal drinking water regulations are implemented consistently across the country and reinforce Agency evidence-building activities. The review includes an analysis of the completion of sanitary surveys by the primacy agency, an evaluation of whether the primacy agency is implementing the state program in accordance with SDWA, a review of state use of the funds and associated impacts, and

alignment of program with national enforcement and compliance priorities. The annual program review directly supports the work of the states and EPA to reduce community water systems out of compliance with health-based standards. In addition, EPA conducts periodic file reviews of state programs. These file reviews help EPA ensure states are accurately reporting compliance information to the Agency so issues can be identified and addressed.

Performance Measure Targets:

(PM DW-02) Number of community water systems still in noncompliance with health-based standards since March 31, 2021.	FY 2022 Target	FY 2023 Target
	640	590
(PM DWT-02) Number of community water systems in Indian Country still	FY 2022	FY 2023
in noncompliance with health-based standards since March 31, 2021.	Target	Target
	100	90
(PM DW-07) Number of drinking water and wastewater systems, tribal and	FY 2022	FY 2023
state officials, and water sector partners provided with security, emergency	Target	Target
preparedness, and climate resilience training and technical assistance.	2,000	2,000

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$20,566.0) This program change is an increase of resources to help states and tribes with primary enforcement authority to implement and enforce NPDWRs under the SDWA. In addition, this increase supports states, territories, and tribes in complying with drinking water regulations, conducting sanitary surveys of public water systems, and providing technical assistance to managers and operators of public water systems.

Statutory Authority:

SDWA § 1443.

Categorical Grant: Radon

Program Area: Categorical Grants Goal: Ensure Clean and Healthy Air for All Communities Objective(s): Reduce Exposure to Radiation and Improve Indoor Air

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$8,685	\$7,795	\$12,487	\$4,692
Total Budget Authority	\$8,685	\$7,795	\$12,487	\$4,692

Program Project Description:

Title III of the Toxic Substances Control Act (TSCA) authorizes EPA to take a variety of actions to address the public health risks posed by exposures to indoor radon. Under the statute, EPA assists states and tribes through the State Indoor Radon Grants (SIRG) Program, which provides categorical grants to develop, implement, and enhance programs that assess and mitigate radon risk. EPA provides guidance to states and tribes to promote and spread effective strategies for reducing indoor radon public health risks. EPA also works with states and tribes to support targeting SIRG funding to reduce risks for low-income populations that lack resources to mitigate radon risk on their own.

Radon is the second leading cause of lung cancer in the United States – and the leading cause of lung cancer mortality among non-smokers – accounting for about 21,000 deaths per year. EPA's non-regulatory Indoor Air - Radon Program, which includes the SIRG grants program, promotes actions to reduce the public's health risk from indoor radon. EPA and the Surgeon General recommend that people do a simple radon home test and, if levels above EPA's guidelines are confirmed, reduce elevated levels by home mitigation using inexpensive and proven techniques. EPA also recommends that new homes be built using radon-resistant features in areas where there is elevated radon. Nationally, risks from radon have been reduced in many homes over the years, but many are still in need of mitigation. This voluntary program promotes partnerships between national organizations, the private sector, and more than 50 state, local, and tribal governmental programs to reduce radon risk.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the FY 2022 - 2026 EPA Strategic Plan.

EPA will administer the SIRG Program, in collaboration with state and tribal partners. Work in this program directly supports the President's priority of advancing environmental justice. In implementing the SIRG Program in FY 2023, EPA will work with states and tribes to build capacity and address environmental justice concerns by assisting grant recipients to address radon

⁶⁸⁷ https://www.epa.gov/radon.

risk reduction in underserved, low-income communities, for example through building code adoption. These interventions serve to institutionalize and embed risk reduction into standard building practices and thus provide equity for underserved communities.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$4,692.0) This program change is an increase to support state and tribal partners through the radon grants program.

Statutory Authority:

Title III of the Toxic Substances Control Act (TSCA).

Categorical Grant: State and Local Air Quality Management

Program Area: Categorical Grants Goal: Ensure Clean and Healthy Air for All Communities

Objective(s): Improve Air Quality and Reduce Localized Pollution and Health Impacts

(Dollars in Thousands)

	(
				FY 2023 President's
		FY 2022	FY 2023	Budget v.
	FY 2021	Annualized	President's	FY 2022 Annualized
	Final Actuals	CR	Budget	CR
State and Tribal Assistance Grants	\$241,186	\$229,500	\$322,198	\$92,698
Total Budget Authority	\$241,186	\$229,500	\$322,198	\$92,698

Program Project Description:

This program provides funding for state air programs, as implemented by state, multi-state, and local air agencies. Section 103 of the Clean Air Act (CAA) provides EPA with the authority to award grants to air pollution control agencies, other public or nonprofit private agencies, institutions, and organizations, to conduct and promote certain types of research, investigations, experiments, demonstrations, surveys, studies, and training related to air pollution. Section 105 of the CAA provides EPA with the authority to award grants to state and local air pollution control agencies to develop and implement continuing environmental and public health programs for the prevention and control of air pollution, implementation of National Ambient Air Quality Standards (NAAQS) and improving visibility in our national parks and wilderness areas (Class I areas). The continuing activities funded under Section 105 include: analysis and planning for attainment and maintenance of NAAQS; emission reduction measures; development and operation of air quality monitoring networks, and other air program activities. Section 106 of the CAA provides EPA with the authority to fund interstate air pollution transport commissions to develop or carry out plans for designated air quality control regions.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.1, Improve Air Quality and Reduce Localized Pollution and Health Impacts in the FY 2022 - 2026 EPA Strategic Plan.

States are responsible for State Implementation Plans (SIPs), which provide a blueprint for the programs and activities that states carry out to attain and maintain the NAAQS and comply with visibility improvement obligations. In FY 2023, affected states will be developing or revising attainment SIPs for areas reclassified to "Moderate" for the 2015 ozone NAAQS, for areas reclassified to "Severe" for the 2008 ozone NAAQS, and for areas designated nonattainment effective April 30, 2021, for the 2010 sulfur dioxide (SO₂) NAAQS. States also have ongoing SIP obligations associated with visibility improvement requirements, among other requirements identified in the CAA. States also will continue implementing the 2008 and 2015 8-hour ozone NAAQS, the 2008 lead NAAQS, the 2010 1-hour nitrogen dioxide (NO₂) NAAQS, and the 2010 1-hour SO₂ NAAQS.

As applicable, states also will continue implementing the previous PM_{2.5} and ozone NAAQS, including the 1997 annual and 24-hour PM_{2.5} NAAQS, the 2006 24-hour PM_{2.5} NAAQS, the 2012 annual PM_{2.5} NAAQS, the revoked 1997 8-hour ozone NAAQS and the revoked 1-hour ozone NAAQS. In FY 2023, EPA will work with states to prioritize activities needed to meet obligations for SIP development and in implementing their plans for attaining and maintaining the NAAQS and achieving regional haze goals and identifying streamlining options. EPA will maximize use of its web-based State Planning Electronic Collaboration System (SPeCS) to review draft SIPs from state air agencies, and to track and process state submittals. States are encouraged to engage with EPA early in their SIP development processes, so EPA has enough time to provide feedback on SIPs prior to formal submission to EPA for review.

To the extent that any ongoing NAAQS reviews result in a change to the standards, air quality designations related activities for the changed standard(s) would be required. The timing of such activities would depend on when the final NAAQS is promulgated.

Air Monitoring Networks

The Nation's ambient air quality monitoring network, an essential element of the Agency's environmental infrastructure, serves as the foundation for the air quality management and control programs. States will continue to operate and maintain their ambient air monitoring networks with technical assistance and program support from EPA. A significant and essential part of a state's overall air program includes the collection, analysis, quality assurance, and submittal of ambient air quality data.

In FY 2023, EPA will continue to lead a nationwide effort to ensure and enhance the resiliency, capacity, and capability of air monitoring systems for NAAQS and local-scale monitoring implemented by state, local, and tribal organizations through: 1) system modernization (e.g., infrastructure improvements and, enhanced network automation); 2) expanded functionality (e.g., increased use of continuous monitoring equipment); and 3) local-scale monitoring to, for example, characterize air toxics and better address air quality burdens in communities with environmental justice concerns.

During FY 2023, EPA will work to complete grant distributions under the American Rescue Plan targeting expanded functionality through direct awards to state, local, and tribal air agencies and targeting local-scale community monitoring through a competitive grant competition. Key to the success of these efforts will be close, meaningful collaboration with our state, local and tribal air partners, as well as disadvantaged and overburdened communities. The COVID-19 pandemic exposed the vulnerabilities of our aging monitoring infrastructure and the need for modernization in the Nation's ambient air monitoring network, while the recommendations of a 2020 GAO report identified the need for the Agency to develop an air quality monitoring modernization plan to better meet the additional information needs of air quality managers, researchers, and the public.

Air Permitting Programs

In FY 2023, states with approved or delegated air permitting programs will implement these programs. EPA will provide technical assistance, as needed.

Emissions Inventories

The development of a complete quality assured emission inventory is an important step in an air quality management process. These inventories are used to help determine significant sources of air pollutants and establish emission trends over time, target regulatory actions, and estimate air quality through dispersion and photochemical modeling. An emission inventory includes estimates of the emissions from various pollution sources in a specific geographical area. In FY 2023, states will continue to develop inventories and submit data to EPA for the next release of the National Emissions Inventory (NEI). EPA plans to release the 2020 NEI in calendar year 2023.

Air Quality Forecasts

The Program supports state and local air agency capabilities to forecast air quality for ozone and PM_{2.5} to provide the public with information they can use to make daily lifestyle decisions to protect their health. This information allows people to take precautionary measures to avoid or limit their exposure to unhealthy levels of air quality, including during extreme events like wildfires. EPA will work with state, tribal, and local air quality agencies to continue improving the fire and smoke map at www.airnow.gov that provides important air quality information during wildfire season.

State and Local Air Toxics Efforts

The Program also supports state and local efforts to characterize air toxics problems and take measures to reduce health risks from air toxics. This funding also supports characterization work that includes collection and analysis of emissions data and monitoring of ambient air toxics. In FY 2023, funds will support the National Air Toxics Trends Stations (NATTS), consisting of 26 air toxics monitoring sites, including the associated quality assurance, data analysis, and methods support.

Visibility Improvement

In FY 2023, EPA will review regional haze SIPs for the second planning period to ensure that states are making reasonable progress towards their visibility improvement goals, consistent with statutory obligations. The first State plans for improving visibility in our national parks and wilderness areas were due in December 2007. Under the Regional Haze Rule, states were required to submit plans for the second planning period to demonstrate how they have and will continue to make progress towards achieving their visibility improvement goals.

Air Quality Training

To fulfill statutory obligations under section 103 of the Clean Air Act in FY 2023, states and multijurisdictional organizations will advance and maintain training priorities for air quality-related subjects; develop new and update existing air quality-related training materials; and provide classroom and other types of training for air quality professionals. In FY 2021, 56 virtual instructor led trainings reached over 2,100 students. Funding for FY 2023 will expand these important programs and help accelerate immediate on-the-ground efforts to reduce greenhouse gases, such as expanding deployment of renewable energy sources and energy efficiency programs; ensuring safe and effective oil and gas well pollution management and prevention; developing policies and programs to facilitate build-out of electric vehicle (EV) charging station infrastructure; increasing air quality monitoring in communities with environmental justice concerns; and supporting programs to improve transportation options and reduce disproportionate exposure to traffic emissions in disadvantaged communities.

Performance Measure Targets:

Work under this program supports performance results in the Federal Support for Air Quality Management under the EPM appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$92,698.0) This program change is an increase that will help expand the efforts of air pollution control agencies to implement their programs and accelerate immediate on-the-ground efforts to reduce greenhouse gases. The increase also will support additional air quality monitoring in environment justice areas and programs to improve transportation options and reduce disproportionate exposure to traffic emissions in disadvantaged communities.

Statutory Authority:

Clean Air Act §§ 103, 105, 106.

Categorical Grant: Toxic Substances Compliance

Program Area: Categorical Grants Goal: Enforce Environmental Laws and Ensure Compliance Objective(s): Detect Violations and Promote Compliance

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$6,150	\$4,760	\$6,877	\$2,117
Total Budget Authority	\$6,150	\$4,760	\$6,877	\$2,117

Program Project Description:

The Toxic Substances Control Act (TSCA) Compliance Monitoring Program builds environmental partnerships ⁶⁸⁸ with states, tribes, and territories to strengthen their ability to address environmental and public health threats from toxic substances. This assistance is used to prevent or eliminate unreasonable risks to human health or the environment and to ensure compliance with toxic substance regulations. The grants support inspection programs associated with lead-based paint (§402(a), §406(b), and the Renovation, Repair, and Painting Rule), the Asbestos Hazard Emergency Response Act (AHERA), and Polychlorinated biphenyls (PCBs).

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Detect Violations and Promote Compliance in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, the Agency requests an additional \$2.1 million to support EPA's state and tribal partners through the TSCA Compliance Monitoring Program. EPA will continue to focus on compliance monitoring programs to prevent or eliminate unreasonable risks to health or the environment associated with chemical substances such as asbestos, lead-based paint, and polychlorinated biphenyls (PCBs), and to encourage states to establish their own compliance and enforcement programs for lead-based paint and asbestos. EPA may provide funding for compliance monitoring grants to states and tribes under TSCA to conduct inspections to ensure compliance with: the Asbestos-in-Schools requirements, the Model Accreditation Plan (MAP), Asbestos Ban and Phase Out Rule, the TSCA Asbestos Worker Protection Rule, lead-based paint regulations, and PCB regulations. For states with an asbestos waiver or lead-based paint programs, these grants also fund enforcement activities. In FY 2023, EPA also will continue to award state and tribal assistance grants to aid in the implementation of compliance and enforcement provisions of TSCA. The weighted formula aligns the distribution of funding with the national program priorities including reducing risks from: 1) lead poisoning or elevated blood-lead levels; 2) exposure to asbestos; and 3) exposure to PCBs. The assistance grants will help rebuild

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⁶⁸⁸ For additional information, please refer to: https://www.epa.gov/compliance/toxic-substances-compliance-monitoring-grant-guidance-fiscal-year-2020.

programmatic capabilities between EPA and partner agencies, and help address environmental justice concerns in overburdened, underserved, and vulnerable communities.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$2,117.0) This program change will help EPA increase the number of newly authorized state programs as well as ensure that already authorized states are able to continue their work reducing risks from toxic substances.

Statutory Authority:

Toxic Substances Control Act.

Categorical Grant: Tribal Air Quality Management

Program Area: Categorical Grants Goal: Ensure Clean and Healthy Air for All Communities

Objective(s): Improve Air Quality and Reduce Localized Pollution and Health Impacts

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$12,964	\$13,415	\$23,126	\$9,711
Total Budget Authority	\$12,964	\$13,415	\$23,126	\$9,711

Program Project Description:

American Indians and Alaskan Natives are disproportionately affected by air pollution and climate change. They have a higher rate of asthma, diabetes, heart disease and chronic obstructive pulmonary disease (COPD) than the general population. Wildfire season has consistently intensified over the past few years due to climate change and extreme weather conditions which has led to an increase in ambient and indoor air pollution and exacerbated the health of tribal communities. Across the Nation, tribal air issues vary from permitting sources on-reservation, to monitoring for criteria air pollutants, to participating in local, state, regional, and national air quality work groups. In addition to performing emissions inventories and monitoring, other program tasks include addressing indoor air quality issues, and reviewing and commenting on permits issued by other agencies.

This program includes funding for tribes and tribal air pollution control agencies implementing projects and programs to address air pollution issues in Indian Country. Using Section 105 authority of the Clean Air Act (CAA), tribal agencies may develop and implement programs for the prevention and control of air pollution and implementation of primary and secondary National Ambient Air Quality Standards (NAAQS). Using Section 103 authority of the CAA, tribal agencies, colleges, universities, and multi-tribe jurisdictional air pollution control agencies may conduct and promote research, investigations, experiments, demonstrations, surveys, studies, and training related to ambient or indoor air pollution in Indian Country. EPA provides technical assistance and resources to help tribes build their program capacity and ensure successful project completion. Tribes use these resources to perform emissions inventories, monitor air quality and implement regulatory, voluntary and education and outreach programs for their citizens, who are among the most environmentally at-risk populations in the country. Currently, only 51 tribes have Section 105 grants, and 66 tribes have Section 103 grants.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.1, Improve Air Quality and Reduce Localized Pollution and Health Impacts in the FY 2022 - 2026 EPA Strategic Plan.

Tribes will assess environmental and public health conditions in Indian Country by developing emission inventories and, where appropriate, siting and operating air quality monitors. Tribes will continue to develop and implement air pollution control programs for Indian Country to prevent and address air quality concerns, including combating the effects of climate change. EPA will continue to fund organizations for the purpose of providing technical support, tools, and training for tribes to build capacity to develop and implement programs.

Currently, there are 574 federally recognized tribes. 689 Of those, 63 tribes have treatment similar to that of a state or treatment as a state regarding implementing functions pertaining to the management and protection of air resources within reservation boundaries or other areas under the tribe's jurisdiction. In addition, EPA awards financial support under the CAA to help build tribal knowledge and increase tribes' capacity to manage air quality issues and encourages tribes to partner with EPA to carry out CAA protections within tribal lands and tribal communities, including those that have environmental justice concerns.

In FY 2023, a key activity is to work to reduce the number of days in violation of the NAAQS. This program supports the Agency's priority of building stronger partnerships with individual tribes and with the National Tribal Air Association, whose priorities include tribes' participation in the Agency's policy and rule development and the Tribal Air Monitoring Support (TAMS) Center. The TAMS Center supports the tribes' ability to collect and provide monitoring data to protect the health of their tribal members. EPA will focus on working with tribes to increase the number of tribes with an up-to-date emissions inventory from the current level of 74. This will increase tribes' knowledge on how to best protect their citizens. Tribes also will focus on implementation of nonregulatory and voluntary programs, as well as education and outreach programs. These will assist with pollution reduction while creating a more informed citizenry. In FY 2023, EPA will work to enhance air monitoring equipment available for loan and support through the TAMS center using funds received under the American Rescue Plan.

The Clean Air Status and Trends Network (CASTNET) has enhanced tribal monitoring capacity by supporting seven sites on tribal lands and training site operators. In FY 2023, the Agency will continue progress toward increasing monitoring capacity by working to identify new tribal partners that would benefit from joining a national air monitoring program. CASTNET monitors provide near real-time air quality data and the ability to assess ecological impacts from atmospheric deposition of air pollutants.

The funding for FY 2023 will support these important programs and help accelerate immediate on-the-ground efforts to reduce greenhouse gases, such as expanding deployment of renewable energy sources and energy efficiency programs; capping of oil and gas wells to reduce volatile organic compound (VOC) and methane emissions; developing policies and programs to facilitate build-out of electric vehicle (EV) charging station infrastructure; increasing air quality monitoring in areas with environmental justice concerns: and supporting programs to improve transportation options and reduce disproportionate exposure to traffic emissions in disadvantaged communities.

⁶⁸⁹ Source: Department of Interior Bureau of Indian Affairs (www.bia.gov).

Performance Measure Targets:

Work under this program supports performance results in the Federal Support for Air Quality Management Program under the EPM appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$9,711.0) This program change is an increase that will help expand the efforts of tribes and tribal air quality control agencies to implement their programs and to accelerate immediate on-the-ground efforts to reduce greenhouse gases. The increase also will support additional air quality monitoring.

Statutory Authority:

Clean Air Act §§ 103, 105.

Categorical Grant: Tribal General Assistance Program

Program Area: Categorical Grants

Goal: Take Decisive Action to Advance Environmental Justice and Civil Rights Objective(s): Promote Environmental Justice and Civil Rights at the Federal, Tribal, State and Local Levels

(Dollars in Thousands)

				FY 2023 President's
		FY 2022	FY 2023	Budget v.
	FY 2021	Annualized	President's	FY 2022 Annualized
	Final Actuals	CR	Budget	CR
State and Tribal Assistance Grants	\$69,308	\$66,250	\$85,009	\$18,759
Total Budget Authority	\$69,308	\$66,250	\$85,009	\$18,759

Program Project Description:

In 1992, Congress established the Indian Environmental General Assistance Program (GAP), a program that provides grants and technical assistance to tribes to plan, develop, and establish tribal environmental protection programs consistent with other applicable provisions of law administered by EPA. The Agency works collaboratively with tribal partners on mutually identified environmental and public health priorities to achieve these aims. Funding provided under the GAP is for the administrative, technical, legal, enforcement, communication, and outreach capacities tribes need to effectively administer environmental regulatory programs that EPA may delegate to tribes. GAP funds also may be used to assist in capacity building so that tribal governments may meaningfully participate in EPA programs, as well as the development and implementation of tribal solid and hazardous waste programs, including solid waste service delivery costs. Please see https://www.epa.gov/tribal/indian-environmental-general-assistance-program-gap for more information.

Some uses of GAP funds include:

- assessing the status of a tribe's environmental conditions;
- developing appropriate environmental programs, codes, and ordinances;
- developing the capacity to administer environmental regulatory programs that EPA may delegate to a tribe;
- conducting public education and outreach efforts to ensure that tribal communities (including non-members residing in Indian country) are informed and prepared to participate in environmental decision-making; and
- establishing tribal programs' capacity to meaningfully participate with federal, Tribal, state, and local government officials on environmental and public health actions and issues.

GAP supports tribal capacity development through financial assistance to approximately 525 tribal governments and intertribal consortia. GAP has helped tribes receive 97 program delegations to administer a variety of programs across relevant EPA statutes, including the Clean Water Act, Safe Drinking Water Act, and the Clean Air Act. Tribes also have developed capacity to assist EPA in implementing federal environmental programs in the absence of an EPA-approved tribal program through Direct Implementation Tribal Cooperative Agreements (DITCAs). As of FY 2022, there are 22 active DITCAs supporting EPA's direct implementation activities. Furthermore, GAP funds have helped to train tribal government inspectors who are able to conduct compliance monitoring activities under tribal laws and may have EPA federal inspector credentials. In addition, GAP also supports tribes with the development of their waste management programs with 281 tribes having Integrated Waste Management Plans and 9 tribes have developed codes and ordinances since FY 2018 with GAP-funded training.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Promote Environmental Justice and Civil Rights at the Federal, Tribal, State, and Local Levels in the *FY 2022 - 2026 EPA Strategic Plan*.

To support this work, EPA is requesting \$18.8 million in additional resources to focus on advancing environmental justice, building tribal climate adaptive capacity, including climate resiliency in infrastructure decision-making, and addressing the clear need across the hundreds of federally recognized tribes for environmental capacity building

GAP grants are fundamental to the development and growth of tribal environmental programs. GAP promotes tribal self-governance in a number of ways, including supporting tribal governments to assess local environmental conditions, develop long-range strategic plans to address their environmental challenges, and establish environmental programs tailored to their needs and aligned with their strategic planning goals. The overlap between tribal environmental capacity building goals and EPA program priorities, including the mutual responsibilities to achieve them, are captured in EPA / Tribal Environmental Plans, or ETEPs. The over 500 ETEPs in place align with the FY 2022-2026 EPA Strategic Plan's Cross-Agency Strategy: Strengthen Tribal, State and Local Partnerships and Enhance Engagement.

In FY 2023, the Agency will continue to implement GAP under a national framework set forth in program guidance and maintain an emphasis on training (internal and external) to support nationally consistent GAP guidance interpretation and implementation. In supporting a strong GAP management framework (as referenced under the Tribal Capacity Program), EPA will continue to establish and refine tools to track the progress tribes achieve toward developing and implementing environmental protection programs in Indian country. A revised GAP national framework as defined in new guidance is anticipated to be effective FY 2023.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$18,759.0) This increase provides support to federally recognized tribes and tribal consortia for planning, developing, and establishing environmental protection programs, and for developing and implementing solid and hazardous waste programs on tribal lands. The program will focus on advancing environmental justice, building tribal climate adaptive capacity, including climate resiliency in infrastructure decision-making, and addressing the clear need across the hundreds of federally recognized tribes for environmental capacity building.

Statutory Authority:

Indian Environmental General Assistance Program Act.

Categorical Grant: Underground Injection Control (UIC)

Program Area: Categorical Grants Goal: Ensure Clean and Safe Water for All Communities Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021	FY 2022 Annualized	FY 2023	FY 2023 President's Budget v. FY 2022 Annualized
	Final Actuals	CR	Budget	CR
State and Tribal Assistance Grants	\$10,604	\$11,164	\$11,387	\$223
Total Budget Authority	\$10,604	\$11,164	\$11,387	\$223

Program Project Description:

EPA's Underground Injection Control (UIC) Grant Program was established by the Safe Drinking Water Act (SDWA) to protect ground water that is a source of drinking water. The Program supports federal, state, and tribal government agencies that oversee underground injection activities to prevent contamination of underground sources of drinking water from fluid injection practices.

The UIC Program protects underground sources of drinking water by ensuring proper permitting, construction, operation, and closure of injection wells used to place fluids underground for storage, disposal, enhanced recovery of oil and gas, and mineral recovery. The grants are made to states and tribes that have primary enforcement authority (primacy) to implement and manage UIC programs and ensure safe injection well operations that prevent contamination of underground sources of drinking water. Eligible tribes that demonstrate an intent to achieve primacy also may receive grants for the initial development of UIC programs and be designated for "treatment as a state" if their programs are approved. Where a jurisdiction does not have primacy, EPA uses these funds for direct implementation of federal UIC requirements.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*. The program also will support the Agency's Infrastructure Investment and Jobs Act implementation priorities.

The FY 2023 request will support implementation of the UIC Program, which manages approximately 743,000 injection wells⁶⁹⁰ across six well types to protect groundwater resources. There are currently 70 jurisdictions across the Nation (federal, state, tribal, and territorial) that implement the UIC Program. EPA directly implements UIC programs in seven states and two territories and shares responsibility in eight states and with two tribes. EPA also administers the

⁶⁹⁰As represented in FY 2019 annual inventory.

UIC programs for all other tribes and for Class VI wells in all states but North Dakota and Wyoming.⁶⁹¹

The UIC Program is improving efficiency and reducing the UIC permit application processing time and will continue implementing the recently developed UIC well permit review process. This effort includes applying identified permit review and processing efficiencies to all well classes, and modifying common definitions, as appropriate, to provide greater clarity for all well classes.

Performance Measure Targets:

Work under this program supports performance results in the Drinking Water Programs under the EPM appropriation and mitigation of climate change to support safe drinking water for the Nation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$223.0) This program change is an increase of resources to support EPA's state and tribal partners in their implementation of the UIC Program.

Statutory Authority:

Safe Drinking Water Act § 1443.

⁶⁹¹ For more information, please visit: https://www.epa.gov/uic/primary-enforcement-authority-underground-injection-control-program.

Categorical Grant: Underground Storage Tanks

Program Area: Categorical Grants Goal: Safeguard and Revitalize Communities Objective(s): Reduce Waste and Prevent Environmental Contamination

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$1,475	\$1,475	\$1,505	\$30
Total Budget Authority	\$1,475	\$1,475	\$1,505	\$30

Program Project Description:

EPA's Underground Storage Tanks (UST) State and Tribal Assistance Grant (STAG) Program provides funding for grants to states under the Solid Waste Disposal Act to improve and enhance UST programs. STAG funds may be used for prevention activities that are not specifically spelled out in the Energy Policy Act (EPAct) of 2005 and are used by states that do not have sufficient state resources to fund these core programs.

STAG funds are used by states⁶⁹² to fund such activities as: applying for state program approval to operate the UST Program in lieu of the federal program, updating UST regulations, and providing compliance assistance.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.2, Reduce Waste and Prevent Environmental Contamination in the FY 2022 - 2026 EPA Strategic Plan.

Due to the increased emphasis on inspections and release prevention requirements, EPA has consistently met the yearly goal to minimize the number of confirmed releases. In FY 2021, there were 4,991 reported releases reflecting a downward trend from 6,847 in FY 2014.

As of FY 2021, 31 states and territories have reported compliance with the UST Technical Compliance Rate (TCR) measure, which came about after the UST rule was revised in 2015. The TCR includes new compliance measures for spill prevention and overfill requirements, as well as additional leak detection requirements. Of the states that report TCR, they produce a TCR rate of 58 percent in FY 2021, which is consistent with the 58 percent rate from FY 2020.

The remaining 22 states and territories will continue to report the Significant Operational Compliance (SOC) rate until they reach their respective UST state regulation effective dates and

⁶⁹² States as referenced here also include the District of Columbia and five territories as described in the definition of a state in the Solid Waste Disposal Act.

move to TCR. In FY 2021, EPA reported an SOC rate of 68 percent, which mirrors the results from FY 2019 and FY 2020. ⁶⁹³

In FY 2023, EPA will continue to work with states to both update their state regulations as appropriate and to reapply for state program approval (SPA). EPA anticipates that of the 40 states with SPA, all of them will have program renewal by the end of FY 2022. In addition, EPA anticipates several new states will apply and be approved for SPA for the first time by the end of FY 2022.

Performance Measure Targets:

Work under this program supports performance results in the LUST Prevention Program under the LUST appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$30.0) This program change increases support for EPA's state and tribal partners through the UST STAG Program. This investment will assist EPA's partners to achieve progress on the ground.

Statutory Authority:

Solid Waste Disposal Act § 2007(f); Consolidated Appropriations Act, 2022, Pub. L. 117-103.

⁶⁹³ For more information on performance measures, please refer to: https://www.epa.gov/ust/ust-performance-measures.

Categorical Grant: Wetlands Program Development

Program Area: Categorical Grants Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$10,111	\$14,192	\$15,079	\$887
Total Budget Authority	\$10,111	\$14,192	\$15,079	\$887

Program Project Description:

The Wetlands Program Development Program assists states, tribes, and local governments with building or enhancing their wetland protection and restoration programs. Wetlands play a critical role absorbing and filtering pollutants from water. Accordingly, protecting and restoring the Nation's wetlands are key to climate resiliency because wetlands reduce flood risk and help manage runoff pollution. Program grants are used to develop new or refine existing state and tribal wetland programs in one or more of the following areas: 1) monitoring and assessment; 2) voluntary restoration and protection; 3) regulatory programs, including Clean Water Act (CWA) Section 401 certification and Section 404 assumption; 694 and 4) wetland water quality standards.

States and tribes develop wetland programs based on their goals and resources. The Program provides grants to support the development of state and tribal wetland programs that further the goals of CWA and improve water quality in watersheds throughout the country. The grants are awarded on a competitive basis under the authority of Section 104(b)(3) of CWA. The grant funding is split among EPA's ten regional offices according to the number of states and territories per region. Each region is required, by regulation, to compete the award of these funds to states, tribes, local governments, interstate agencies, and inter-tribal consortia. ⁶⁹⁵ In addition, EPA sets aside ten percent of the appropriation for a grant competition specifically for tribes and inter-tribal consortia. Finally, EPA sets aside approximately five percent of the appropriation for a grant competition specifically for nonprofits, interstate, and inter-tribal consortia. This grant competition supports state and tribal wetland programs with projects that are nationwide in scope or affect two or more EPA Regions and trains local communities on restoration practices.

⁶⁹⁴ State and tribal assumption of CWA Section 404 is an approach that can be useful in streamlining 404 permitting in coordination with other environmental regulations. When states or tribes assume administration of the federal regulatory program, Section 404 permit applicants seek permits from the state or tribe rather than the federal government. States and tribes are in many cases located closer to the proposed activities and are often more familiar with local resources, issues, and needs. Even when a state assumes permitting under Section 404, the United States Army Corps of Engineers retains jurisdiction for a certain portion of waters under the CWA as well as those waters subject to Section 10 of the River and Harbors Act for permits.

⁶⁹⁵ For more information, please see: http://water.epa.gov/grants-funding/wetlands/estp.cfm.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2023, EPA will continue to assist states and tribes in their efforts to protect and manage wetlands through documenting stresses or improvements to wetland condition, developing tools for wetland restoration and the use of natural infrastructure to mitigate flooding and storm surge hazards, investigating opportunities to factor in climate change and environmental justice in decision-making, and implementing regulatory controls to avoid, minimize, and compensate for wetland impacts. These activities also will help achieve the goals of the Administration's Justice40 initiative.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$887.0) This program change is an increase in resources to increase the core capacity of state, local, and tribal implementing partners to build or enhance wetland protection and restoration programs.

Statutory Authority:

Clean Water Act $\S 104(b)(3)$.

State and Tribal Assistance Grants (STAG)

Diesel Emissions Reduction Grant Program

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Tackle the Climate Crisis
Objective(s): Reduce Emissions that Cause Climate Change

(Dollars in Thousands)

	1			
				FY 2023 President's
		FY 2022	FY 2023	Budget v.
	FY 2021	Annualized	President's	FY 2022 Annualized
	Final Actuals	CR	Budget	CR
State and Tribal Assistance Grants	\$87,360	\$90,000	\$150,000	\$60,000
Total Budget Authority	\$87,360	\$90,000	\$150,000	\$60,000

Program Project Description:

The Diesel Emissions Reduction Act (DERA) Grant Program provides support for emission reductions from existing diesel engines through engine replacements, including zero emission replacements, retrofits, and rebuilds; switching to cleaner fuels; idling reduction; and other emission reduction strategies. The DERA Program was initially authorized in Sections 791-797 of the Energy Policy Act of 2005 and reauthorized by the Diesel Emission Reduction Act of 2010 and in the Consolidated Appropriations Act of 2022.

Diesel engines are the modern-day workhorse of the American economy (e.g., goods movement, construction, public transportation). Diesel engines are extremely efficient and power nearly every major piece of equipment on farms, construction sites, in ports, and on highways. As the Agency's heavy-duty highway and nonroad diesel engines emissions standards came into effect, new cleaner diesel engines started to enter the Nation's fleet. However, there are millions of older engines in use that will continue to emit large amounts of nitrogen oxides and particulate matter, including black carbon. DERA funding accelerates the pace at which dirty engines are retired or retrofitted. EPA's DERA Program promotes strategies to reduce these emissions and protect public health by working with air quality professionals, environmental and community organizations, manufacturers, fleet operators, tribes, and state and local officials. DERA funding provides both a public health and climate benefit and can be directed to areas with the greatest need. DERA funding is targeted to areas with air quality challenges of and grants funding is prioritized for projects that benefit communities with environmental justice concerns.

Ports are places where large concentrations of diesel equipment often converge – including ships, trucks, rail, and nonroad machinery. The near-port communities that bear the brunt of air pollution from these diesel engines are often comprised of low-income populations and people of color. These residents can be exposed to air pollution associated with emissions from diesel engines at ports including particulate matter, nitrogen oxides, ozone, and air toxics. These pollutants can contribute to significant health problems, including premature mortality, increased hospital admissions for heart and lung disease, increased cancer risk, and increased respiratory symptoms,

 ⁶⁹⁶ DERA Fourth Report to Congress. https://www.epa.gov/sites/production/files/2019-07/documents/420r19005.pdf.
 697 DERA Fourth Report to Congress. https://www.epa.gov/sites/production/files/2019-07/documents/420r19005.pdf.

especially for children, the elderly, outdoor workers, and other sensitive populations. DERA prioritizes grant funding to ports and goods movement projects to benefit nearby communities.

FY 2023 Activities and Performance Plan:

Work in this Program directly supports Goal 1/Objective 1.1, Reduce Emissions that Cause Climate Change in the FY 2022 - 2026 EPA Strategic Plan.

Since its inception, the DERA Program has provided funding support for cutting-edge clean technologies that reduce emissions from diesel-powered mobile sources. The continuing innovation shown in this sector is now creating new opportunities to look to more zero emission options in source categories ranging from highway trucks to port cargo handling equipment. EPA is committed to look for ways to help expedite this transition as part of its DERA implementation effort. Taking into account the DERA Program's continuing role in advancing environmental justice and tackling the climate crisis, EPA will evaluate the DERA Program to identify the appropriate actions the Agency can take to support this policy objective in FY 2023, as outlined in Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad*.

Work in this Program directly supports EO 14008 and its Justice40 Initiative to target 40 percent of the benefits of climate investments to disadvantaged communities. The DERA Program is part of the Justice40 pilot.

The DERA Grant Program will prioritize projects that provide a health benefit to residents of communities near centers of goods movement and projects that benefit areas with environmental justice concerns. Priority is given to projects that will benefit communities near goods movement facilities like ports that receive a disproportionate quantity of air pollution from diesel fleets. Further priority is given to projects whose leaders engage and partner with affected communities with environmental justice concerns to directly address those needs and concerns and where the applicant or their partner(s) have or commit to creating a policy or process to engage communities on operations and projects that impact air quality beyond the specific DERA project. EPA encourages prospective DERA grant applicants to take advantage of a series of community-port collaboration materials, ⁶⁹⁸ published by EPA's Ports Initiative, including case studies on four community-port collaboration pilot projects that took place in Seattle, New Orleans, Savannah, and Providence. ⁶⁹⁹

Using the formula outlined in the Energy Policy Act of 2005, eligible states and territories are offered 30 percent of the annual DERA appropriation to implement projects under the DERA State Grants Program. The remaining DERA funding is awarded as rebates and competitive grants. Through the DERA National Grants and the DERA Tribal and Insular Area Grants, the Agency will competitively award grants focusing on areas with poor air quality, especially those impacted most severely by emissions from ports and goods movement. Priority for funding also is given to projects benefitting communities with environmental justice concerns and projects which engage communities in the design and performance of the project. EPA will continue to track, assess, and

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⁶⁹⁸ For more information, please visit: https://www.epa.gov/community-port-collaboration/community-port-collaboration-toolkit.
699 For more information, please visit: https://www.epa.gov/ports-initiative/case-studies-improving-environmental-performance-and-economic-prosperity-ports-and.

report the results of DERA grants, such as numbers of engines, emissions benefits, and costbenefit information. Further, EPA will continue to provide diesel emission reduction technology verification and evaluation and provide that information to the public. 701

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$60,000.0) This program change is an increase in the overall amount of DERA grant funding available for grants and rebates to reduce harmful diesel emissions and tackle the climate change crisis, with a focus on priority areas including school buses, ports, and communities with environmental justice concerns.

Statutory Authority:

The Diesel Emissions Reduction Program is authorized by Title VII, Subtitle G of the Energy Policy Act of 2005, 42 USC 16131, et seq., as amended.

⁷⁰⁰ List of all grant awards under DERA can be found at https://www.epa.gov/cleandiesel/clean-diesel-national-grants.

⁷⁰¹ For more information, please visit: https://www.epa.gov/cleandiesel.

Brownfields Projects

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Safeguard and Revitalize Communities

Objective(s): Clean Up and Restore Land for Productive Uses and Healthy Communities

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$101,296			551
Total Budget Authority	\$101,296	\$90,982	\$130,982	\$40,000

Program Project Description:

The Brownfields Program awards grants and provides technical assistance to help states, tribes, local communities, and other stakeholders involved in environmental revitalization and economic redevelopment to work together to plan, inventory, assess, safely cleanup, and reuse brownfields, particularly in disadvantaged communities. Approximately 143 million people (roughly 44 percent of the U.S. population) live within three miles of a brownfields site that received EPA funding. Similarly, within a half mile of a brownfields site receiving EPA funding, 21 percent of people live below the national poverty level, 17 percent have less than a high school education, 56 percent are people of color, and seven percent are linguistically isolated. This idle land drags down property values and can slow a local economy.

Brownfields redevelopment is a key to revitalizing main streets, neighborhoods, and rural communities; increasing property values and creating jobs, especially for those environmental justice (EJ) and persistent poverty communities that are often left out of economic and environmental revitalization. Important environmental impacts of brownfields cleanup and redevelopment include improved water quality associated with reduced runoff from stormwater and nonpoint pollutant sources, and improved air quality associated with reduced greenhouse gas emissions from vehicles travel. 703 The Brownfields Program leverages federal, state, and local resources to strengthen partnerships across all levels of government and with the private sector, allowing these partners to build on each other's successes.

Since its inception, the Brownfields Program has fostered a community-driven approach to the reuse of contaminated sites. As of March 2022, grants awarded by the Program have led to over 146,000 acres of idle land made ready for productive use and over 183,000 jobs and over \$35.0 billion leveraged. By awarding brownfields grants, EPA makes investments in communities so

⁵⁸ U.S. EPA, Office of Land and Emergency Management 2020. Data collected includes: (1) Superfund, Brownfield, and RCRA Corrective Action site information as of the end of FY 2019; (2) UST/LUST information as of late-2018 to mid-2019 depending on the state; and (3) 2015-2018 American Community Survey (ACS) Census data.

⁷⁰³ For more information on Brownfields Program Environmental & Economic Benefits please refer to:

https://www.epa.gov/brownfields/brownfields-program-environmental-and-economic-benefits.

⁷⁰⁴ From EPA website: https://www.epa.gov/brownfields/brownfields-program-accomplishments-and-benefits#:~:text=Enrolled%20over%2034%2C191%20properties%20annually,3%2C478%2C000%20acres%20ready%20for%20 reuse.

that they can realize their own visions for land reuse, infrastructure development, economic growth, and job creation.

Under this program, EPA will focus on core activities, providing funding for: 1) assessment cooperative agreements and Targeted Brownfields Assessments (TBAs); 2) cleanup and multipurpose cooperative agreements; and 3) research, training, and technical assistance to communities for brownfields-related activities, including land revitalization assistance, environmental workforce development, and job training cooperative agreements.

A 2017 study found that housing property values increased five to 15.2 percent near brownfield sites when cleanup was completed. 705 Analysis of the data near 48 brownfields sites shows that an estimated \$29 to \$97 million in additional tax revenue was generated for local governments in a single year after cleanup. This is two to seven times more than the \$12.4 million EPA contributed to the cleanup of those brownfields. 706 In addition, based on historical data provided by the Assessment Cleanup and Redevelopment Exchange System (ACRES) database, \$1 of EPA's Brownfields funding leverages \$20.43 in other public and private funding.⁷⁰⁷

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.1, Clean Up and Restore Land for Productive Uses and Healthy Communities in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA requests an investment of \$40 million to advance EJ in tandem with climate work. This investment will align with the Administration's Justice 40 initiative by stimulating economic opportunity and environmental revitalization in more than 400 historically overburdened communities. These resources will build on current work to revitalize communities across the country by providing financial and technical assistance to assess, cleanup, and plan reuse at brownfields sites. The Brownfields Program will continue to foster federal, state, tribal, local, and public-private partnerships to return properties to productive economic use, including in historically disadvantaged and communities with EJ concerns. The activities described below will leverage approximately 13,400 jobs and \$2.6 billion in other funding sources.⁷⁰⁸

- Funding will support at least 120 assessment cooperative agreements that recipients may use to inventory, assess, and conduct cleanup and reuse planning at brownfields sites. Approximately 1,080 site assessments will be completed under these agreements, including in communities affected by the retirement of coal-fired power plants.
- EPA will provide funding for TBAs in up to 200 communities without access to other assessment resources or those that lack the capacity to manage a brownfields assessment grant. There is special emphasis for small, rural, and disadvantaged communities to submit

⁶¹ Haninger, K., L. Ma, and C. Timmins. 2017. The Value of Brownfield Remediation. Journal of the Association of Environmental and Resource Economists, 4(1): 197-241, https://www.journals.uchicago.edu/doi/pdfplus/10.1086/689743. 62p://dx.doi.org/10.1142/S1464333217500132.

⁶³ For more information, please visit <u>www.epa.gov/brownfields</u>.

⁷⁰⁸ U.S. EPA, Office of Land and Emergency Management Estimate. All estimates of outputs and outcomes are supported by the data that is entered by cooperative agreement recipients via EPA's ACRES database.

requests for this funding to ensure equal access to brownfields assessment resources. These assessments will be performed through contracts and interagency agreements.

- Funding will support 42 direct cleanup cooperative agreements to enable eligible entities to clean up recipient owned properties.
- The Agency will provide funding for approximately 16 new Revolving Loan Fund (RLF) cooperative agreements. This funding enables recipients to make loans and subgrants for the cleanup of brownfield sites and establishes a sustainable RLF Program. In addition, the Agency will provide supplemental funding to approximately 18 existing high performing Revolving Loan Fund (RLF) cooperative agreement recipients. These awards will lead to approximately 36 additional sites cleaned up, with a particular focus on cleanups in disadvantaged communities.
- Funding will support 20 Environmental Workforce Development & Job Training (EWDJT) cooperative agreements. This funding will provide environmental job training for citizens to take advantage of new jobs created as a result of brownfield assessment, cleanup, and revitalization in their communities. These awards will lead to approximately 980 people trained and 680 placed in jobs.
- Funding also will support training, research, technical assistance cooperative agreements, interagency agreements, and contracts to support states, tribes, and communities for both the Brownfields and Land Revitalization programs and other assistance mechanisms, as authorized under Comprehensive Environmental Response, Compensation, and Liability Act 104(k)(7).
- Funding will be provided for technical assistance to an estimated 150 small and disadvantaged communities.

All estimates of outputs and outcomes are supported by the data that is entered by cooperative agreement recipients via the ACRES database and analyzed by EPA. Maintenance of ACRES focuses on the input of high-quality data, and robust analysis regarding program outcomes and performance will continue to be priorities during FY 2023.

Performance Measure Targets:

(PM B29) Number of brownfields properties assessed.	FY 2022 Target	FY 2023 Target
	1,400	1,400
(PM B30) Number of brownfields sites made ready for anticipated use.	FY 2022 Target	FY 2023 Target
	600	600
(DM D22) Number of business also and an	EV 2022	EV 2022
(PM B32) Number of brownfields properties cleaned up.	FY 2022 Target	FY 2023 Target
	130	130

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$40,000.0) This program change is an increase to support the cleanup of sites, with a particular focus on those in disadvantaged communities. The investment will stimulate economic development and promote environmental revitalization. \$15 million is designated for quality cooperative agreements targeted at communities affected by the retirement of coal-fired power plants.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §§ 101(39) and 104(k).

Infrastructure Assistance: Alaska Native Villages

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021	FY 2022 Annualized	FY 2023 President's	FY 2023 President's Budget v. FY 2022 Annualized
	Final Actuals	CR	Budget	CR
State and Tribal Assistance Grants	\$36,607	\$36,186	\$40,000	\$3,814
Total Budget Authority	\$36,607	\$36,186	\$40,000	\$3,814

Program Project Description:

The Alaska Rural and Native Village (ANV) Program provides critical basic drinking water and sanitation infrastructure (e.g., flushing toilets and running water) in vulnerable rural and Native Alaskan communities that lack such services. Alaskan rural and native water and sewer systems face not only the typical challenges associated with small system size, but also challenging climate and geographic conditions, such as permafrost, shortened construction seasons, and extremely remote locations.

ANV communities look to EPA as a critical funding source of when they or the State of Alaska are not able to fully finance the needed water infrastructure improvements. The Program serves communities that often lack the debt capacity to apply for other funding sources, including EPA State Revolving Loan Funds. The Indian Health Service's (IHS) November 2021 analysis illustrates the need to assist these communities – the IHS identified \$285 million of need for water and wastewater infrastructure in Alaska in FY 2021. Many communities on the prioritized list have not been able to advance their projects due to lack of funding.

Investments in wastewater and drinking water infrastructure in rural Alaskan communities contributed to an increase of access to water and sewer service from 69 percent in the late 1990s to 97 percent in 2021. The late 1990s to 97 percent in 2021. While the gains in the Program have been significant, ANV communities continue to trail behind the non-tribal/non-native population in the United States in access to water and sanitation. In Alaska, a significantly higher percentage of native and rural serviceable households live without complete indoor plumbing.

The ANV Program also supports training, technical assistance, and educational programs to improve the financial management, operation, and maintenance of sanitation systems. The training also results in a trained workforce with transferable job skills. This is done through leveraging prioritization and implementation expertise from the State of Alaska⁷¹⁰ with ANV program funds.

⁷⁰⁹ For more information please see: State of Alaska OMB Key Performance Indicators Department of Environmental Conservation https://www.omb.alaska.gov//html/performance/program-indicators.html?p=37&r=1.

⁷¹⁰ The State of Alaska uses a risk-based prioritization process to fund projects that will have the greatest public health and environmental benefit. Further, the State delivers these services to ANV communities by coordinating across federal agencies and Programs.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

The FY 2023 request of \$40.0 million, which is \$3.8 million above FY 2022 levels, will fund water infrastructure in rural Alaskan homes and maintain the existing level of wastewater and drinking water infrastructure that meets public health standards, given increased regulatory requirements on drinking water systems and the rate of construction of new homes in rural Alaska. The funding will be used to leverage funds provided to the IHS by Congress and particularly by the IIJA for the portion of the projects that are deemed ineligible by IHS for IHS IIJA funding. Across all funding sources, the goal is to provide service to most of the remaining unserved homes over the course of the five years of the IIJA. Additionally, the request will continue to support training, technical assistance, and educational programs that protect existing federal investments in infrastructure by improving operation and maintenance of the systems. Improved operation and maintenance will improve system performance and extend the life of the asset.

In FY 2023, the Agency will continue to work with the State of Alaska to address sanitation conditions and maximize the value of the federal investment in rural Alaska. EPA will continue to implement the Alaska Rural and Native Village "Management Controls Policy," adopted in June 2007, to ensure efficient use of funds by allocating them to projects that are ready to proceed or progressing satisfactorily. The Agency has made great strides in implementing more focused and intensive oversight of the ANV grant program through cost analyses, post-award monitoring, and timely closeout of projects. These activities will help meet targets as part of the Justice40 pilot program.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$3,814.0) This increase of resources will improve sanitation in rural and native Alaska villages and fully funds the authorized level for the program in the Drinking Water and Wastewater Infrastructure Act (DWWIA).

Statutory Authority:

Safe Drinking Water Act Amendments of 1996 § 303; Clean Water Act § 1263a.

Infrastructure Assistance: Clean Water SRF

Program Area: State and Tribal Assistance Grants (STAG) Goal: Ensure Clean and Safe Water for All Communities Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$1,788,798	\$1,638,826	\$1,638,847	\$21
Total Budget Authority	\$1,788,798	\$1,638,826	\$1,638,847	\$21
Total Workyears	4.0	3.6	3.6	0.0

Program Project Description:

The Clean Water State Revolving Fund (CWSRF) Program capitalizes state revolving loan funds in all 50 states and Puerto Rico to finance infrastructure improvements for public wastewater systems and projects to improve water quality. In addition to capitalizing state revolving loan funds, the CWSRF appropriation includes a provision for set-aside funding for tribes to address serious wastewater infrastructure needs and associated health impacts. A portion of the CWSRF appropriation also provides direct grant funding for the District of Columbia and United States territories. These funds directly support the Agency's goal to ensure waters are clean through improved water infrastructure and sustainable management. The CWSRF Program also implements American Iron and Steel⁷¹¹ (AIS) requirements, as required by law.

The CWSRF Program is the largest source of federal funds for states to provide low-interest loans and other forms of assistance for water quality projects including construction of wastewater treatment facilities, water and energy efficiency projects, green infrastructure projects, and agricultural Best Management Practices (BMPs). This federal investment is designed to be used in concert with other sources of funds to address water quality needs. 712 Other tools, such as additional subsidization, are available as part of the CWSRF Program to assist small, rural, and overburdened and underserved communities. The CWSRF Program is a key component of EPA's efforts to achieve innovative solutions to wastewater infrastructure needs and realize economic and environmental benefits that will continue to accrue in the future.

The revolving nature of the funds and substantial state match contributions have greatly multiplied the federal investment. EPA estimates that for every federal dollar contributed thus far, the Nation has received more than three dollars of investment in water infrastructure. As of June 2021, the CWSRF Programs has provided a total of over \$153 billion from all funding sources in affordable financing for a wide variety of wastewater infrastructure and other water quality projects.⁷¹³ In 2021, over 1,700 assistance agreements were made with communities of all sizes, funding \$8.2

713 Clean Water State Revolving Fund National Information Management System. U.S. EPA, Office of Water, National Information Management System Reports: Clean Water State Revolving Fund (CWSRF). Washington, DC (As of June 30, 2021).

⁷¹¹ For additional information, please see: https://www.epa.gov/cwsrf/state-revolving-fund-american-iron-and-steel-ais-<u>requirement.</u>
712 For additional information, please see: http://www.epa.gov/cwsrf.

billion in projects aimed at treating wastewater, addressing stormwater runoff, tackling non-point source pollution, and addressing a myriad of other environmental issues.⁷¹⁴

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan. Work under this program also directly supports progress toward the FY 2022-2023 Agency Priority Goal: Clean up contaminated sites and invest in water infrastructure to enhance the livability and economic vitality of overburdened and underserved communities. By September 30, 2023, EPA will provide technical assistance to at least 10 communities to help achieve clean and safe water and reduced exposures to hazardous substances. To Current work is focused on developing a map-based screening tool to assist regions in identifying these communities.

The federal investment in the CWSRF in FY 2023 will continue to support progress toward meeting the Nation's clean water needs and infrastructure priorities while creating good paying jobs. The infrastructure and other water management projects receiving low interest loans and additional subsidization from the CWSRF protect public health, strengthen the economy and local neighborhoods, and contribute to healthy ecosystems. Underserved communities can benefit from the program because its low-cost financing and additional subsidization make these needed investments more affordable.

EPA continues to work with states to meet several key objectives, such as:

- Linking projects to environmental results;
- Targeting funding and technical assistance to rural, small, and disadvantaged communities with limited ability to repay loans; and
- Ensuring the CWSRFs remain reliable sources of affordable funding.

In FY 2023, EPA is requesting over \$1.6 billion to provide funding for critical wastewater infrastructure through the CWSRF Program and nearly \$2.8 billion for the Clean Water and Drinking Water State Revolving Funds (SRFs) combined. Funding requested in FY 2023 would complement the robust investments provided for the SRFs in the Infrastructure Investment and Jobs Act. The requested level supports several priority areas including improving resilience to natural hazards such as climate change; addressing environmental justice concerns by providing resources to remedy disproportionate levels of pollution in vulnerable communities; and creating good paying jobs. The Program will encourage states to prioritize funding for projects focused on climate change resiliency. These funding levels advance infrastructure repair and replacement and would allow states, municipalities, and other eligible borrowers to continue to finance high-priority investments that improve water quality and protect human health.

Elsewhere, EPA requests \$80 million for the Water Infrastructure Finance and Innovation Act (WIFIA) Program. Through the WIFIA Program, EPA will make direct loans to regionally or nationally significant water infrastructure projects. The combined investments of the SRFs and

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⁷¹⁴ Clean Water State Revolving Fund National Information Management System. U.S. EPA, Office of Water, National Information Management System Reports: Clean Water State Revolving Fund (CWSRF). Washington, DC (As of June 30, 2021).

⁷¹⁵ This Agency Priority Goal is implemented jointly with Goal 6.

WIFIA Program advance the Agency's ongoing commitment to infrastructure repair and replacement. These funds represent a major investment in water infrastructure and will create thousands of good paying jobs across the country.

To help drive progress, EPA has established a target to increase the cumulative amount of non-federal dollars leveraged by water infrastructure programs (CWSRF, DWSRF, and WIFIA), with a goal of \$9 billion in FY 2023. Over \$22.3 billion in non-Federal dollars was leveraged by these programs in FY 2020 and FY 2021, increasing the funds available to improve, repair, and modernize the Nation's water infrastructure.

The FY 2023 capitalization of the CWSRF would supplement the more than \$153 billion in total assistance provided over the life of the program. The assistance provided in 2021 from federal capitalization, state contributions, and repayments was \$8.2 billion.

EPA requests that 10-20 percent of the total CWSRF capitalization grant funds made available to each state be used to provide additional subsidization to eligible recipients in the form of principal forgiveness, negative interest loans, or grants (or any combination of these). These funds may be used to address infrastructure needs in disadvantaged communities, in addition to those facing environmental justice issues.

In addition to capitalizing the CWSRF Program, a portion of the appropriation also will provide direct grants to tribes and communities in territories. These communities are in great need of assistance because they have lacked the resources to upgrade wastewater infrastructure, causing significant public health and environmental concerns. To ensure sufficient resources are directed toward these communities, EPA continues to request a tribal set-aside of 2 percent, or \$30 million, whichever is greater, of the funds appropriated in FY 2023. EPA also continues to request a set-aside of 1.5 percent of the funds appropriated for the territories of American Samoa, Guam, the Commonwealth of Northern Marianas, and the United States Virgin Islands. These activities will help work toward meeting targets as part of the Justice40 pilot program.

EPA requests that up to \$2 million of the tribal set-aside be used for training and technical assistance related to the operation and management of tribal wastewater treatment works. EPA also requests the ability to use the tribal and territorial set-asides to support:

- planning and design of treatment works; and
- the construction, repair, or replacement of privately-owned decentralized wastewater treatment systems serving one or more principal residences or small commercial establishments (e.g., septic systems).

This authority is similar to those already available to states. Giving EPA the authority to provide expanded support for planning and design will protect the federal investment in wastewater infrastructure and ensure access to safe wastewater treatment for tribes and territories that face significant challenges with sanitation infrastructure. The ability for both the tribes and territories to construct, repair, or replace decentralized wastewater treatment systems will allow the flexibility

that these communities require to provide wastewater infrastructure that is appropriate for the unique circumstances of each community.

In conjunction with this request, the FY 2023 President's Budget is submitting a proposal to expand the authority of the existing small set-aside for the American Iron and Steel (AIS) requirement from the CWSRF in order to fund future Clean Watershed Needs Surveys (CWNS). The CWNS is a comprehensive assessment of the capital needed to meet the water quality goals of Sections 205(a) and 516 of the Clean Water Act. This assessment and documentation of future needs is critical in the effort to manage and fund our nation's wastewater infrastructure. A comprehensive CWNS is an important tool for identifying critical water quality needs in communities across the Nation, including rural, small, and disadvantaged communities. It also helps assess the scope of investments needed to reduce the vulnerability of water infrastructure to natural hazards, including climate change. The proposed appropriation language does not change the current set-aside percentage of up to 0.25 percent of the CWSRF level, which will allow EPA to continue to fully fund the required Clean Water AIS management and oversight activities and provide reliable and sufficient resources to conduct the CWNS. The FY 2023 Budget requests that up to \$1.5 million of the AIS set aside be available to conduct the CWNS.

EPA will partner with states to ensure that the CWSRF Program continues to play an important role in promoting efficient system-wide planning; improvements in technical, financial, and managerial capacity; and the design, construction, and ongoing management of sustainable water infrastructure. To streamline data collection and reduce reporting burden, EPA in FY 2022 redesigned the databases used to collect performance information about the CWSRF and DWSRF Programs. The goal of this effort is to reduce reporting burden by eliminating redundancy and providing a more user-friendly interface for states to submit data. EPA completes annual reviews of each CWSRF to help assess effective implementation of the Clean Water Revolving Fund Categorical Grant program and encourage states to direct funding to projects that address climate resiliency and equity.

Performance Measure Targets:

(PM INFRA-01) Billions of non-federal dollars leveraged by EPA's water infrastructure finance programs (CWSRF, DWSRF and WIFIA).	FY 2022 Target	FY 2023 Target
initiastructure initiatee programs (CWSRI, DWSRI and WITIN).	9	9
(PM WWT-02) Number of American Indian and Alaska Native homes	FY 2022	FY 2023
provided access to basic sanitation, in coordination with other agencies.	Target	Target
	6,098	6,098

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$30.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (-\$9.0) This net program change is an adjustment to state Clean Water SRF programs, which EPA will apply based on the Clean Water Act formula.

Statutory Authority:

Title VI of the Clean Water Act.

Infrastructure Assistance: Drinking Water SRF

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$1,224,269	\$1,126,088	\$1,126,095	\$7
Total Budget Authority	\$1,224,269	\$1,126,088	\$1,126,095	\$7
Total Workyears	1.6	1.4	1.4	0.0

Program Project Description:

EPA's Drinking Water State Revolving Fund (DWSRF) is designed to assist public water systems in financing the costs of drinking water infrastructure improvements needed to achieve or maintain compliance with Safe Drinking Water Act (SDWA) requirements, protect public health, and support state and local efforts to protect and provide drinking water. These funds finance critical infrastructure necessary to ensure safe drinking water for all Americans while creating good paying jobs and upgrading and modernizing America's drinking water systems. The 2015 Drinking Water Infrastructure Needs Survey and Assessment (DWINSA) indicated a 20-year capital investment need of \$472.6 billion for public water systems eligible to receive funding from state DWSRF Programs. The capital investment need covered 49,250 community water systems (CWS), 21,400 not-for-profit non-community water systems (NPNCWS), American Indian water systems, and Alaska Native Village (ANV) water systems. The 2015 DWINSA need reflected costs for repairs and replacement of leaking transmission pipes and deteriorated storage and treatment equipment, as well as new infrastructure and other projects, e.g., replacing lead service lines, required to protect public health and ensure compliance with the SDWA.

To reduce public health risks and help ensure safe and reliable delivery of drinking water nationwide, EPA makes capitalization grants to states in order to provide low-cost loans and other assistance to eligible public water systems and maintain robust drinking water protection programs. In addition to maintaining the statutory focus on addressing the greatest public health risks first, states can help those most in need on a per household basis according to state affordability criteria and can utilize set-asides to assist small systems. To maintain a focus on communities most in need, states are required to provide a portion of their capitalization grant as additional subsidization to disadvantaged communities.

The DWSRF Program provides communities access to critical low-cost financing and offers a subsidy to help utilities address long-term needs associated with water infrastructure. Most DWSRF assistance is offered as loans which water utilities repay from the revenues they generate from the rates they charge their customers for service.

Water utilities in many communities may need to evaluate the rate at which they invest in drinking water infrastructure repair and replacement to keep pace with their aging infrastructure, many of which may be approaching the end of their lives.

EPA works with states to ensure that DWSRF infrastructure and technical assistance funds are available to water systems in disadvantaged communities that have the most significant drinking water challenges. EPA emphasizes assistance to projects which reduce lead and help water systems achieve resiliency to natural hazards, including climate change.

State Set-Asides

States have considerable flexibility to tailor their DWSRF program to their unique circumstances. This flexibility ensures that each state can carefully and strategically consider how best to achieve the maximum public health protection. To achieve this, states may set aside and award funds for targeted activities that can help them implement and expand their drinking water programs. The four DWSRF state set-asides 716 are:

- Small System Technical Assistance (up to two percent);
- Administrative and Technical Assistance⁷¹⁷ (up to four percent, \$400 thousand or one-fifth percent of the current valuation of the fund, whichever is greater);
- State Program Management (up to ten percent); and
- Local Assistance and Other State Programs (up to fifteen percent).

Taken together, approximately 31 percent of a state's DWSRF capitalization grant may be set aside for activities other than infrastructure construction. These set-asides enable states to improve water system operation and management, emphasizing institutional capacity as a means of achieving sustainable water system operations. Over the past three years, states have increased their set-asides to approximately 23 percent. States can utilize these set-aside funds to help drinking water systems, especially those in small and disadvantaged communities, increase their technical, managerial, and financial capacity and receive the planning and capacity building assistance they need to effectively manage the systems and plan for the future.

Non-Federal Funding Leveraging

The federal investment is designed to be used with other sources of funds to address drinking water infrastructure needs. States are required to provide a 20 percent match for their capitalization grant. Some states elect to leverage their capitalization grants through the public debt markets to enable the state to provide more assistance. These features, including state match leveraging and the revolving fund design of the Program, have enabled the states to provide assistance exceeding 200 percent of the federal capitalization since the Program's inception in 1997. For every dollar the

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⁷¹⁶ For more information, please see: https://www.epa.gov/drinkingwatersrf/how-drinking-water-state-revolving-fund-works#tab-

^{5. 717} For more information, please see: https://www.congress.gov/bill/114th-congress/senate-bill/612/text.

federal government invests in this Program, the states, in total, have delivered over two dollars in assistance to water systems. In addition, the DWSRF's rate of funds utilized⁷¹⁸ was 96.6% percent in 2021, surpassing the funds utilization target of 96 percent.

The FY 2023 capitalization of the DWSRF would supplement more than \$48.5 billion in total assistance provided over the life of the Program, from all funding sources. The assistance provided in 2021 from federal capitalization, state contributions, and repayments was \$3.8 billion, a significant increase from recent years.

National Set-Asides

Prior to allotting funds to the states, EPA reserves certain national level set-asides. The statute requires that \$2 million be allocated to small systems to monitor for unregulated contaminants to facilitate their compliance with the monitoring and reporting requirements of the Unregulated Contaminant Monitoring Regulation (UCMR). In FY 2022, EPA requested to set aside \$12 million to provide small systems with the resources needed to implement the new statutorily mandated expansion of the UCMR Program. Section 2021 of the America's Water Infrastructure Act (AWIA) of 2018 requires, subject to availability of appropriations and adequate laboratory capacity, all Public Water Systems (PWSs) serving 3,300 to 10,000 persons to monitor under future UCMR cycles. It also requires EPA to ensure that a nationally representative sample of PWSs serving fewer than 3,300 persons monitor under future UCMR cycles. In FY 2023, EPA proposes to again set-aside \$12 million for this new statutory mandate.

The 1996 SDWA established the current UCMR Program. It includes statutory provisions that require EPA to coordinate and pay the monitoring costs for a representative selection of small water systems that serve fewer than 10,000 individuals. Historically under this emerging contaminant monitoring program, EPA would require sampling at 800 small water systems that would be selected to represent the over 60,000 small water systems throughout the United States. AWIA included statutory revisions amending SDWA and mandating (subject to the availability of appropriations) that EPA significantly expand the small water system monitoring program. Starting with UCMR 5 (FY 2022-2026), the total number of small systems monitored will increase 7.5 times, from 800 to 6,000. This expansion will include all 5,200 public water systems that serve between 3,300 and 10,000 individuals and a representative selection of 800 systems serving fewer than 3,300 individuals.

EPA will direct up to two percent or \$20 million, whichever is greater, of appropriated funds to tribes and ANVs. These funds are awarded either directly to tribes or, on behalf of tribes, to the Indian Health Service through interagency agreements. Additionally, EPA will continue to set aside up to 1.5 percent for territories.

In addition, SDWA requires that no funds made available by a state DWSRF as authorized by SDWA Section 1452 (42 U.S.C. 300j-12) shall be used for a project for the construction, alteration, maintenance, or repair of a public water system unless all of the iron and steel products used in the

⁷¹⁸ The cumulative dollar amount of loan agreements divided by cumulative funds available for projects.

⁷¹⁹ Safe Drinking Water Act Sections 1452(i)(1), 1452(i)(2), 1452(j), and 1452(o), as amended.

project are produced in the United States. The Administrator may retain up to 0.25 percent of the funds appropriated in this Act for the Clean Water and Drinking Water State Revolving Funds for carrying out the provisions for management and oversight of the requirements of this section.

Additionally, EPA is requesting authority in the DWSRF to fund the Drinking Water Needs Survey (DWNS). Every four years, EPA works with states and community water systems to estimate the DWSRF eligible needs of system by state over the next 20 years. EPA uses this information as part of the formula for state allocations of the DWSRF. The FY 2023 President's Budget includes up to \$1.5 million set-aside from the DWSRF to ensure there are consistent and reliable resources to fund this important work.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan. Work under this program also directly supports progress toward the FY 2022-2023 Agency Priority Goal: Clean up contaminated sites and invest in water infrastructure to enhance the livability and economic vitality of overburdened and underserved communities. By September 30, 2023, EPA will provide technical assistance to at least 10 communities to help achieve clean and safe water and reduced exposures to hazardous substances. Current work is focused on developing a map-based screening tool to assist regions in identifying these communities.

In FY 2023, EPA will work to increase by \$9 billion the cumulative amount of non-federal dollars leveraged by water infrastructure finance programs (CWSRF, DWSRF and WIFIA). For FY 2023, EPA requests \$1.13 billion for the DWSRF to help finance critical infrastructure improvement projects to public drinking water systems. The funding will accelerate infrastructure replacements and investments. The investments support several priority areas including improving the resilience of water systems to natural hazards, including climate change, ensuring that every community in the Nation has access to clean, safe water, and creating good paying jobs. The Program will encourage states to prioritize funding for projects focused on system resiliency. In FY 2023, EPA requests nearly \$2.8 billion for the Drinking Water and Clean Water State Revolving Funds (SRFs). The SRF infrastructure budget, combined with the funding from the Water Infrastructure Finance and Innovation Act (WIFIA) Program, provides robust funding for critical drinking and wastewater infrastructure. This request will complement the historic amount of funding provided in the Infrastructure and Investment Jobs Act.

The requested funding level reflects documented needs for drinking water infrastructure and improvements to infrastructure in small and disadvantaged communities. EPA will continue to foster its strong partnership with the states to provide small system technical assistance with a focus on compliance with rules, operational efficiencies, and system sustainability to ensure public health protection. In FY 2023, EPA also will continue to amplify information on available funding options for local utilities and state programs to meet critical infrastructure needs.

⁷²⁰ This Agency Priority Goal is implemented jointly with Goal 6.

Furthermore, as a pilot program under Justice40, the Agency will leverage all available authorities, tools, and resources to meet key administration priorities in investments in overburdened and underserved communities. EPA will continue to work to target a significant portion of assistance from SRFs to small and overburdened and underserved communities with limited ability to repay loans. In FY 2023, EPA is requesting that 14 percentage of the funds provided to the states be available for additional subsidy and allow states to go above that percentage if there is an emergency declared for lead.

In FY 2023, the DWSRF Program will continue to implement the Clean Water and Drinking Water Infrastructure Sustainability Policy. This policy focuses on promoting system-wide planning that helps water systems:

- align water infrastructure system goals;
- analyze infrastructure alternatives, including energy efficient alternatives; and
- ensure they have the financial capacity and rate structures to construct, operate, maintain, and replace infrastructure over time.

In FY 2023, EPA is continuing to emphasize strengthening small system technical, managerial, and financial capability through the Capacity Development Program, the Operator Certification Program, the Public Water System Supervision State Grant Program, and the DWSRF. The Capacity Development Program establishes a framework for states and water systems to work together to help small systems achieve the SDWA's public health protection objectives. The state Capacity Development Programs are supported federally by the Public Water System Supervision state grant funds and the set-asides established in the DWSRF. In FY 2023, EPA will continue to work with states to review and update their capacity development strategies to include asset management as required by AWIA.

Performance Measure Targets:

(PM DW-02) Number of community water systems still in noncompliance with health-based standards since March 31, 2021.	FY 2022 Target	FY 2023 Target
	640	590
(PM DWT-02) Number of community water systems in Indian Country still	FY 2022	FY 2023
in noncompliance with health-based standards since March 31, 2021.	Target	Target
	100	90
(PM INFRA-01) Billions of non-federal dollars leveraged by EPA's water	FY 2022	FY 2023
infrastructure finance programs (CWSRF, DWSRF and WIFIA).	Target	Target
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FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$11.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

• (-\$4.0) This program change is an adjustment to state Drinking Water SRF programs, which EPA will apply based on the Safe Drinking Water Act formula.

Statutory Authority:

Safe Drinking Water Act § 1452.

San Juan Watershed Monitoring

Program Area: State and Tribal Assistance Grants (STAG) Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

		,		FY 2023 President's
		FY 2022	FY 2023	Budget v.
	FY 2021	Annualized	President's	FY 2022 Annualized
	Final Actuals	CR	Budget	CR
State and Tribal Assistance Grants	\$6,363	\$4,000	\$4,000	\$0
Total Budget Authority	\$6,363	\$4,000	\$4,000	\$0

Program Project Description:

This program was established under Section 5004(d) of the Water Infrastructure Improvements for the Nation Act of 2016 (WIIN). EPA and the states and tribes in the San Juan watershed—Arizona, Colorado, New Mexico, Utah, Navajo Nation, Ute Mountain Ute Tribe, and Southern Ute Indian Tribe—work together to monitor water quality and use the best available data and science to identify and implement pollution prevention and restoration projects to improve water quality 721.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

The FY 2023 request of \$4 million will continue to fund the Gold King Mine Program (also referred to as the San Juan Watershed Program). The states and tribes, with support from EPA, will continue to monitor water quality across the watershed and inform stakeholders about water quality conditions. In addition, the Program is preparing to fund pollution prevention and restoration projects with the objective to restore water quality throughout the watershed.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• There is no change in program funding.

⁷²¹ For more information please see: http://www.epa.gov/sanjuanwatershed.

Statutory Authority:

Water Infrastructure Improvements for the Nation Act, Title IV, § 5004(d); Clean Water Act § 106.

Infrastructure Assistance: Mexico Border

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

				,
				FY 2023 President's
		FY 2022	FY 2023	Budget v.
	FY 2021	Annualized	President's	FY 2022 Annualized
	Final Actuals	CR	Budget	CR
State and Tribal Assistance Grants	\$19,591	\$30,000	\$30,000	\$0
Total Budget Authority	\$19,591	\$30,000	\$30,000	\$0

Program Project Description:

EPA works collaboratively with United States (U.S.) federal, state, and local partners and the Mexican water agency - CONAGUA - through the U.S.-Mexico Border Water Infrastructure Program to fund planning, design, and construction of high-priority water and wastewater treatment facilities for underserved communities along the border. Investments in wastewater and drinking water infrastructure in communities on both sides of the U.S.-Mexico Border reduce disease and health care costs associated with exposure to raw sewage and drinking water contaminants causing acute and chronic illnesses. U.S.-Mexico Border Water Infrastructure projects stimulate local economies through public health-related economic gains, job creation, and increased demand for goods and services.

Untreated sewage flowing north into the U.S. from Tijuana, Mexicali, and Nogales pollutes the Tijuana, New River, and Santa Cruz rivers. Untreated sewage also pollutes shared waters, such as the Rio Grande, Pacific Ocean, and the Gulf of Mexico. The close proximity and intermingling of border communities that have poor quality drinking water and sanitation poses a serious risk of disease transmission. The U.S. and Mexico share more than two thousand miles of common border from the Gulf of Mexico to the Pacific Ocean and over 62 miles on either side of the international border. The border region is home to more than 15.2 million people with about 8 million living in the U.S. (U.S. Census Bureau 2017 estimates) and more than 7 million living in Mexico's Border Municipalities (Instituto Nacional de Estadística y Geografía-INEGI, 2015 estimate). Twenty-six U.S. federally recognized Native American tribes also are located in the U.S.-Mexico border region.

To date, the Program has funded 139 projects. More than nine million people are benefiting from 122 completed projects, and over 1.3 million people will benefit from projects currently under construction. Since 2003, the Program has provided approximately 61,130 homes with first time access to safe drinking water and around 893,810 homes with first time access to wastewater collection/treatment.

The EPA's Border Water Infrastructure Program is unique among federal funding programs. It is the only federal program that can fund projects on both sides of the border. Citizens of the U.S. benefit from all projects since all funded projects must demonstrate that they will provide a positive public health and/or environmental benefit to the U.S., whether the project is located in the U.S. or Mexico. For example, a wastewater project in Mexico can only be funded if that sewage would otherwise contaminate a U.S. waterbody. Treating these waters after they have been contaminated and have crossed the border into the U.S. is neither technically feasible nor financially viable. The Agency's investments in the Mexican side projects have represented only a third of the total project construction costs, while leveraging two thirds of the remaining total costs from the Mexican government and other funding sources and preventing contamination from raw sewage discharges in shared waters. The EPA's investment leverages Mexican funds for the benefit of the U.S. If not for the Agency's investment, Mexican funds would likely be invested in other parts of Mexico that do not directly benefit the U.S.. Preventing raw sewage discharges to shared water resources is especially critical in a region that is already facing water scarcity challenges.

The close bi-national cooperation in this program has improved public health and water quality. Improving access to clean and safe water is a key focus of the *Border 2025 Plan*, ⁷²² the bi-national agreement that guides efforts to improve environmental conditions in the U.S.-Mexico Border region.

The U.S.-Mexico Border Program is one of the few federal programs that assists communities in the planning and design of water and sanitation infrastructure projects. Planning and design are essential to advance projects to a construction ready stage, create sustainable communities and access public and private funding. Twenty-four projects with construction costs estimated at nearly \$235 million are currently in planning and design. More than 2 million border residents will benefit once all these projects are complete.

U.S.-Mexico Border communities are looking to EPA as a last-resort funding source when utilities, cities, or states are not able to fully finance needed infrastructure improvements. The Program serves communities that often lack the debt capacity to apply for other funding sources, including EPA's State Revolving Funds. To improve opportunities for communities to request funding support for these critical investment needs, in FY 2017, EPA, in coordination with the North American Development Bank, modified the process to allow for applications to be submitted on a continuous basis through an on-line format available 24 hours a day and seven days per week. Since 2017, a total of 34 applications have been selected and are currently in development or construction. Those applications represent an estimated construction investment need of over \$349 million. The Program continues to receive new applications and evaluates these on, at least, a quarterly basis.

EPA investments in these wastewater projects are protecting public health from waterborne diseases and have been a key factor in significant water quality improvements in U.S. waterbodies, such as the Rio Grande (Texas and New Mexico), Santa Cruz River (Arizona), New River (California), and Tijuana River and Pacific Ocean (California). In both the New River and the middle Rio Grande, for example, fecal coliforn levels have dropped by over 80 percent because of jointly funded wastewater treatment plants built in Mexicali and Ojinaga, Mexico, respectively. California beaches in the border region that were once closed throughout the year due to wastewater pollution from Mexico now remain open throughout the summer, resulting in decreased health risks to beachgoers and an economic benefit for local governments. The Santa

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⁷²² For more information please visit: https://www.epa.gov/usmexicoborder/border-2025-framework.

Cruz River now supports a healthy fish population where a few years ago only bloodworms thrived.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

With the requested \$30 million for FY 2023, the U.S.-Mexico Border Water Infrastructure Program will continue to fund high-priority water and wastewater infrastructure projects. Projects that receive funding have been evaluated and ranked using a risk-based prioritization system, which enables the Program to direct grant funding to projects that demonstrate human health benefits, cost-effectiveness, institutional capacity, and sustainability. EPA coordinates at local, national, and bi-national levels to assess the environmental needs and make prioritized funding decisions. All program funding will be invested in projects that, whether located in the U.S. or Mexico, provide a positive public health and/or environmental benefit to the U.S. The U.S. benefits include improved quality of U.S. water bodies and shared waters and reduced health risk to the U.S. population. The demonstration of a U.S. benefit is one of the fundamental eligibility criteria for projects seeking program assistance.

The U.S.-Mexico Border Water Infrastructure Program works with the ten border states (four U.S. and six Mexican) and local communities to improve the region's water quality and public health. The U.S. and Mexican governments will collaborate on water infrastructure projects to reduce health risks to residents, including vulnerable populations of children and the elderly, many of whom currently lack access to safe drinking water and sanitation. Additionally, by providing homes with access to basic sanitation, the EPA and its partners will reduce the discharge of untreated wastewater into surface water and groundwater. These activities will help meet targets as part of the Justice40 pilot program.

FY 2023 funding will be allocated to a portion of the construction of projects that have completed planning and design and are ready to move to construction. Final decisions on the use of FY 2023 funding will be based on balancing the construction needs of fully designed projects with the planning and design needs of prioritized projects.

Performance Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• There is no change in program funding.

Statutory Authority:

Treaty entitled "Agreement between the United States of America and the United Mexican States on Cooperation for the Protection and Improvement of the Environment in the Border Area, August 14, 1983".

Targeted Airshed Grants

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Improve Air Quality and Reduce Localized Pollution and Health Impacts

(Dollars in Thousands)

	,			
				FY 2023 President's
		FY 2022	FY 2023	Budget v.
	FY 2021	Annualized	President's	FY 2022 Annualized
	Final Actuals	CR	Budget	CR
State and Tribal Assistance Grants	\$52,895	\$59,000	\$59,000	\$0
Total Budget Authority	\$52,895	\$59,000	\$59,000	\$0

Program Project Description:

The Targeted Airshed Grants Program awards competitive grant funding to reduce air pollution in nonattainment areas that were ranked as the top five most polluted areas relative to ozone, annual average fine particulate matter (PM_{2.5}), or 24-hour PM_{2.5} National Ambient Air Quality Standards (NAAQS). In FY 2021, approximately \$59 million in competitive grant funds were allocated for this program. This program assists air pollution control agencies in conducting emission reduction activities in these nonattainment areas. The overall goal of the Targeted Airshed Grant Program is to reduce air pollution in the Nation's areas with the highest levels of ozone and PM_{2.5} ambient air concentrations.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.1, Improve Air Quality and Reduce Localized Pollution and Health Impacts in the FY 2022 - 2026 EPA Strategic Plan.

Work in this program directly supports the President's priorities to tackle the climate crisis and advance environmental justice. The targeted airshed grant program provides funding to air pollution control agencies with responsibilities for the State Implementation Plan (SIP) or Tribal Implementation Plan (TIP) for the eligible nonattainment areas. This program can fund any activities that achieve documentable emission reductions to assist eligible nonattainment areas meet the NAAQS.

Air pollution control agencies that have responsibilities for these areas will continue to implement projects that improve the air quality in the listed nonattainment areas. Expected projects include:

- Replacing vehicles, engines, or equipment with cleaner alternatives;
- Replacing or retrofitting heat devices (e.g., wood burning stoves, fireplaces); and
- Other projects that achieve quantifiable emission reductions for the applicable pollutant(s), such as road paving, providing dry seasoned wood, and other residential wood smoke reduction activities.

Anticipated projects will achieve demonstrable reductions in air pollutants that contribute to the nonattainment status of the eligible areas, including reductions in direct PM_{2.5}, NO_x, volatile organic compounds (VOCs), SO₂, and/or ammonia. They will provide direct health and environmental benefits to communities. Priority funding for these grants goes to emission reduction projects that promote environmental justice in eligible nonattainment areas based on how well the projects will effectively address the disproportionate and adverse cumulative impacts (human health, environmental, climate-related and others) that have affected and/or currently affect people/communities of color, low income, tribal, and indigenous populations.

Over their lifetime, the thirteen projects funded by the FY 2019/FY 2020 Targeted Airshed Grants are estimated to reduce total emissions of particulate matter by approximately 5,600 tons and ozone precursors by approximately 6,700 tons.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• There is no change in program funding.

Statutory Authority:

Consolidated Appropriations Act, 2022, Pub. L. 117-103.

Safe Water for Small & Disadvantaged Communities

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$45,312	\$26,408	\$80,002	\$53,594
Total Budget Authority	\$45,312	\$26,408	\$80,002	\$53,594
Total Workyears	1.0	1.0	1.0	0.0

Program Project Description:

EPA awards Small and Disadvantaged Communities Drinking Water Grants to states to assist public water systems in underserved, small, and disadvantaged communities. The grants are designed to assist communities that are unable to finance activities needed to comply with the National Drinking Water Regulations and to respond to drinking water contaminants.

In FY 2021, the Program awarded funding totaling over \$28 million to 28 states. These grants and the cost share requirement contributed to over \$83 million in project investments in small, underserved, and disadvantaged communities.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

EPA is requesting \$80 million in FY 2023 to assist small and disadvantaged communities with improving their drinking water resources, a nearly \$54 million increase over FY 2022 levels. The FY 2023 request will provide additional grant funding and support to address lead and other contaminants in drinking water, especially in small and disadvantaged communities. Many of these communities are rural and have limited access to other sources of funding. These grants are awarded as non-competitive grants to states, with a separate tribal allotment. The grant program provides assistance to overburdened and underserved communities that either have no household drinking water or wastewater services or are served by a public water system that violates or exceeds any maximum containment level, treatment technique, or action level. Projects eligible for assistance include those designed to:

- return a public water system to compliance;
- efforts that benefit overburdened and underserved communities on a per household basis;

- programs to provide household water quality testing, including testing for unregulated contaminants; and
- activities necessary for a state to respond to a contaminant.

With \$80 million in grant funding, the Program is estimating than over 100 projects would receive funding. With non-federal cost share, EPA estimates these projects would total \$120 million in project investment in small, disadvantaged, and underserved communities. The Program will support the Agency's Infrastructure Investment and Jobs Act of 2021 (IIJA) implementation priorities.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$9.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$53,585.0) This program change increases the amount of grant funding available under the Safe Water for Small and Disadvantaged Communities program and reflects the President's priority on addressing lead and other contaminants in drinking water, especially in small and disadvantaged communities. This fully funds the authorized level for this program in the Drinking Water and Wastewater Infrastructure Act (DWWIA).

Statutory Authority:

Water Infrastructure Improvements for the Nation Act, Title IV, Section 2104; Consolidated Appropriations Act, 2022, Pub. L. 117-103.

Reducing Lead in Drinking Water

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$40,053	\$21,511	\$182,002	\$160,491
Total Budget Authority	\$40,053	\$21,511	\$182,002	\$160,491
Total Workyears	1.0	1.0	1.0	0.0

Program Project Description:

The Reducing Lead in Drinking Water grant program was established in Section 2105 of the Water Infrastructure Improvements for the Nation Act of 2016 (WIIN). Objectives of the grant program are to reduce the concentration of lead in drinking water by 1) replacing lead service lines (LSLs); 2) identifying and addressing conditions that contribute to increased concentration of lead in drinking water; and 3) providing assistance to low-income homeowners to replace lead service lines. The grant program supports the President's commitment to eliminating lead service lines and the goal of ensuring clean and safe water for all by prioritizing applications from disadvantaged communities. In FY 2020, EPA announced the availability of \$40 million in grant funding to assist disadvantaged communities with removing sources of lead in drinking water from drinking water systems and schools. In FY 2021, EPA awarded funding to ten projects across the nation for LSL replacement, improvements in drinking water infrastructure, and lead remediation and replacement activities in schools and childcare facilities.

In FY 2022, the Agency plans to announce the next cycle of competition for approximately \$20 million in grant funding to continue to reduce lead exposure in drinking water in underserved and overburdened communities.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

Work in this program directly supports efforts related to the reduction of lead exposures and associated health impacts in disadvantaged communities. The Program supports infrastructure and/or treatment improvements in public drinking water systems, as well as the remediation and/or replacement of drinking water infrastructure in schools and childcare facilities. The FY 2023 request includes \$182 million for the Reducing Lead in Drinking Water grant program, which is a \$160.5 million increase over FY 2022 levels. This request fully funds the Infrastructure Investment

⁷²³ For more information please see: https://www.whitehouse.gov/briefing-room/statements-releases/2021/12/16/fact-sheet-the-biden-harris-lead-pipe-and-paint-action-plan/.

and Jobs Act of 2021 (IIJA) authorized level of \$100 million in FY 2023 for this program. In addition, an increase of \$82 million is requested for lead service line replacement activities with a focus on underserved and overburdened communities. Such funds are intended to complement the IIJA funding provided for lead service line replacements through the Drinking Water State Revolving Fund (DWSRF). Funding will be used to provide grants to eligible entities to fund lead service line replacement and/or remediation projects that meaningfully reduce the concentration of lead in drinking water with a priority for underserved and overburdened communities. The prioritization will be based on the affordability criteria established by the applicable state. This funding will allow EPA to fund approximately 30 to 80 projects across the country in FY 2023. These activities will help work toward meeting targets as part of the Justice40 pilot program.

Performance Measure Targets:

Work under this program supports the Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$8.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$160,483.0) This program change is an increase that supports the President's priority of addressing lead in drinking water, especially in small and disadvantaged communities, and supports advancing environmental justice and equitable outcomes. EPA will prioritize assisting underserved and overburdened communities, low-income homeowners, and landlords providing housing to low-income renters.

Statutory Authority:

Water Infrastructure Improvements for the Nation Act, Title IV, Section 2105; Consolidated Appropriations Act, 2022, Pub. L. 117-103.

Lead Testing in Schools

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

				FY 2023 President's
		FY 2022	FY 2023	Budget v.
	FY 2021	Annualized	President's	FY 2022 Annualized
	Final Actuals	CR	Budget	CR
State and Tribal Assistance Grants	\$19,430	\$26,500	\$36,500	\$10,000
Total Budget Authority	\$19,430	\$26,500	\$36,500	\$10,000

Program Project Description:

The goals of the Grant Program are to: 1) reduce children's exposure to lead in drinking water; 2) help states target funding to schools and childcare facilities unable to pay for testing and/or remediation; 3) utilize the Training, Testing, and Taking Action (3Ts) approach to establish best practices for a lead in drinking water prevention program; 4) foster sustainable partnerships at the state and local level to facilitate exchange of information among experts in the education and health sectors and more efficient use of existing resources; 5) and enhance community, parent, and teacher cooperation and trust.

In FY 2021, EPA announced \$26.5 million in grant funding for the Program. The Agency continues to award funding to the states and the District of Columbia, while also adding new participants including Puerto Rico, American Samoa, and the United States Virgin Islands. By the end of FY 2021, funding was awarded to 43 states, but constraints caused by the COVID-19 pandemic slowed implementation.

Funding in FY 2021 allowed over 6,100 schools or childcare facilities to test for lead exposure in drinking water, directly impacting over 1.1 million children in disadvantaged communities. In FY 2021, the Agency also worked with seven tribal consortia to award over \$4.3 million in grants to support tribal schools and childcare programs.⁷²⁴

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

The Drinking Water and Wastewater Infrastructure Act of 2021 amended Safe Drinking Water Act Section 1464 (Lead Testing in Schools grant) to include remediation (termed "lead reduction") in the statutory language. This important amendment allows program grants to support both water testing and remediation of the sources of the lead in drinking water in schools and childcare facilities. In FY 2023, EPA is requesting \$36.5 million to provide grants to support voluntary

⁷²⁴ For more information, please see: https://www.epa.gov/tribaldrinkingwater/wiin-act-section-2107-lead-testing-school-and-child-care-program-drinking-water.

testing for lead contamination in drinking water at schools and childcare facilities and for remediation of sources of lead in the drinking water in those facilities, which is a \$10 million increase. The FY 2023 funding will improve drinking water quality for vulnerable populations and help schools and childcare facilities better protect children in overburdened and underserved communities.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the nation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$10,000.0) This program change is an increase in resources to support the Administration's priority on addressing lead in drinking water, especially in small and disadvantaged communities. This fully funds the authorized level for the Program in the Drinking Water and Wastewater Infrastructure Act (DWWIA).

Statutory Authority:

Safe Drinking Water Act § 1464(d), as amended by AWIA, Pub. L. 115-270 § 2006.

Drinking Water Infrastructure Resilience and Sustainability

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$4,000	\$25,000	\$21,000
Total Budget Authority	\$0	\$4,000	\$25,000	\$21,000

Program Project Description:

The Program assists public water systems serving small and underserved communities in the planning, design, construction, implementation, operation, or maintenance of a program or project that increases resilience to natural hazards, including climate change. This program focuses on increasing water infrastructure investment and improving drinking water and water quality, especially in underserved and overburdened communities across the country.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA is requesting \$25 million for the Drinking Water Infrastructure Resilience and Sustainability Grant Program, which supports the Administration's priority of assisting eligible entities in the planning, design, construction, implementation, operation, or maintenance of a program or project that increases resilience to natural hazards, including climate change. This represents an increase of \$21 million.

The FY 2023 request will allow EPA to fund projects across the country, accelerating the ability of public water systems to take action to improve their resilience. FY 2023 grants will support a wide range of locally relevant activities, including

- water conservation or the enhancement of water use efficiency;
- modification or relocation of existing drinking water system infrastructure that is at risk for significant impairment by natural hazards, including risks to drinking water from climate change and flooding;
- design or construction of desalination facilities to serve existing communities;
- enhancement of water supply through the use of watershed management and source water protection;

- enhancement of energy efficiency or the use and generation of renewable energy in the conveyance or treatment of drinking water; or
- development and implementation of activities to increase the resilience of the eligible entity to natural hazards.

These grants will help ensure that water systems across the country, especially those serving disadvantaged communities, have the resources needed to reduce the vulnerability of their water infrastructure to natural hazards.

Performance Measure Targets:

Work under this program supports performance results in the Drinking Water State Revolving Fund and Categorical Grant: Public Water System Supervision (PWSS) Programs under the STAG appropriation and the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$21,000.0) This program change is an increase in resources to support water infrastructure in communities. This funding will ensure access to safe drinking water and supports the Administration's priority on assisting eligible entities in the planning, design, construction, implementation, operation, or maintenance of a program or project that increases resilience to natural hazards.

Statutory Authority:

AWIA, P.L. 115-270, Section 2005.

Technical Assistance for Wastewater Treatment Works

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

		<u> </u>		FY 2023 President's
		FY 2022	FY 2023	Budget v.
	FY 2021	Annualized	President's	FY 2022 Annualized
	Final Actuals	CR	Budget	CR
State and Tribal Assistance Grants	\$0	\$18,000	\$18,000	\$0
Total Budget Authority	\$0	\$18,000	\$18,000	\$0

Program Project Description:

This Program provides grants to nonprofit organizations to help rural, small, and tribal municipalities to: 1) obtain Clean Water State Revolving Fund (CWSRF) financing; 2) protect water quality and achieve and maintain compliance with the requirements of the Clean Water Act (CWA); and 3) disseminate planning, design, construction, and operation information for small publicly owned wastewater systems and decentralized wastewater treatment systems. Program funding also provides training to operators, staff, and managers on sustainable and effective management, financial, and operational practices.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

The FY 2023 request of \$18 million will continue funding for the Technical Assistance for Treatment Works Grant Program. The Program supports environmental justice and work in underserved communities. Underserved communities are more likely to experience water infrastructure challenges because of a lack of staff capacity and limited resources to pay for external expertise. In FY 2023, EPA will provide grants to nonprofit organizations to support training and technical assistance to help rural, small, and tribal municipalities obtain CWSRF financing, protect water quality and ensure CWA compliance, and share information on planning, design, construction, and operation of wastewater systems. These activities also will help achieve the goals of the Administration's Justice40 initiative.

Performance Measure Targets:

Work under this program supports performance results in the Drinking Water State Revolving Fund and Clean Water State Revolving Fund Programs under the STAG appropriation and the Water Infrastructure Finance and Innovation Act (WIFIA) Program under the WIFIA appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• There is no change in program funding.

Statutory Authority:

AWIA, P.L. 115-270, Section 4103 and Clean Water Action Section 104(b)(8).

Sewer Overflow and Stormwater Reuse Grants

Program Area: State and Tribal Assistance Grants (STAG) Goal: Ensure Clean and Safe Water for All Communities Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$6,308	\$40,000	\$280,000	\$240,000
Total Budget Authority	\$6,308	\$40,000	\$280,000	\$240,000
Total Workyears	0.3	0.0	5.0	5.0

Program Project Description:

The Sewer Overflow and Stormwater Reuse Municipal Grant (OSG) Program provides grants to fund projects that mitigate the effect of extreme weather events. These events cause storm water issues and increase the incidence of combined and sanitary sewer overflows. The grants fund projects that include green as well as gray infrastructure. Many underserved and marginalized communities will benefit from the work funded by these grants. In 2021, EPA established an allocation formula for how funds will be distributed for the states, District of Columbia, and the United States territories to provide grants to municipalities to manage combined sewer overflows, sanitary sewer overflows, and stormwater flows.⁷²⁵

EPA awards grants using a formula that captures sewer overflow 726 and stormwater infrastructure needs. To the extent eligible projects exist, 20 percent of the appropriated funds must be for projects utilizing green infrastructure, water and energy efficiency improvements, or other environmentally innovative activities. Section 50204 of the Infrastructure Investment and Jobs Act amends the OSG Program to include a minimum state allocation of 25 percent of each state's grant be used for eligible projects in rural or financially distressed communities.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

The FY 2023 request includes \$280 million for the OSG program, a nearly \$240 million increase. These funds will be used to help local officials mitigate the impact of extreme weather events with an increased focus on rural communities and financially distressed communities and the livelihoods of their residents. As these events can have a disparate impact on residents of disadvantaged communities, this investment supports the Administration's priority for

725 For more information please visit; https://www.federalregister.gov/documents/2021/02/24/2021-03756/state-formula-

allocations-for-sewer-overflow-and-stormwater-reuse-grants.

726 For more information please visit: https://www.epa.gov/cwsrf/sewer-overflow-and-stormwater-reuse-municipal-grants- program.

environmental justice and will support reaching targets under the Administration's Justice40 initiative. This grant program also advances the Administration's priority for ensuring climate resilient infrastructure by funding projects that manage stormwater levels from extreme wetweather events. In the 2012 Clean Watersheds Needs Survey, states reported a forward-looking 20-year infrastructure need for combined sewer overflows, sanitary sewer overflows, and stormwater management in the amount of \$99.8 billion.

Performance Measure Targets:

Work under this program supports performance results in the Drinking Water State Revolving Fund and Clean Water State Revolving Fund Programs under the STAG appropriation and the Water Infrastructure Finance and Innovation Act (WIFIA) Program under the WIFIA appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$45.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$239,955.0 / +5.0 FTE) This program change is an increase of resources and FTE to support the ever-growing need in America to improve the infrastructure and management of combined sewer overflows, sanitary sewer overflows, and stormwater issues and their effects on public health and the environment. This program change includes \$800.0 thousand in payroll costs. This increase also fully funds the authorized level for the Program in the Drinking Water and Wastewater Infrastructure Act (DWWIA).

Statutory Authority:

America's Water Infrastructure Act of 2018, P.L. 115-270, Section 4106, Infrastructure Investment and Jobs Act of 2021, P.L. 117-58, Section 50204, Sec 221 Clean Water Act (33 USC 1301).

Water Infrastructure Workforce Investment

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$3,000	\$17,711	\$14,711
Total Budget Authority	\$0	\$3,000	\$17,711	\$14,711

Program Project Description:

Drinking water and wastewater utilities provide a unique opportunity for access to stable, rewarding, and high-quality careers. As utilities make critical investments in infrastructure, drinking water and wastewater, utilities also must invest in the development of a strong local workforce to strengthen communities and ensure a strong pipeline of skilled and diverse workers for today and tomorrow.

This Program, created in consultation with the United States Department of Agriculture, provides competitive grants to be used to connect individuals to career opportunities at drinking water and wastewater utilities and increase public awareness of careers in this field. EPA selects experienced and qualified non-profit, labor organizations, educational institutions, and public works departments that can work with a broad array of water utilities.

This program supports efforts to increase representation from women, people of color, and tribes in this sector. Most jobs in this sector do not require college degrees, and apprenticeship and training programs can prepare people to have high-paying, meaningful professions that support the water sector and economic development in their communities.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

The FY 2023 request of \$17.7 million, an increase of \$14.7 million, for the innovative Water Infrastructure Workforce Development Investment Grant Program will: 1) assist in the development and use of innovative activities relating to water workforce development and career opportunities in the drinking water and wastewater utility sector and 2) expand public awareness about drinking water and wastewater utilities and to connect individuals to careers in the drinking water and wastewater utility sector. Program funding will support activities such as internship, pre-apprenticeship, apprenticeship, and post-secondary bridge programs; education programs for

⁷²⁷For more information, please see: https://www.epa.gov/sustainable-water-infrastructure/innovative-water-infrastructure/workforce-development-program

elementary, secondary, and higher education students; regional industry and workforce collaboratives; secondary integrated learning laboratories; and leadership development.

Additional resources requested in FY 2023 will support community-based organizations and public works departments or agencies to align water and wastewater utility workforce recruitment efforts, training programs, retention efforts, and community resources with water and wastewater utilities.

Performance Measure Targets:

Work under this program supports performance results in the Drinking Water State Revolving Fund and Clean Water State Revolving Fund Programs under the STAG appropriation and the Water Infrastructure Finance and Innovation Program (WIFIA) under the WIFIA appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$14,711.0) This program change is an increase of resources to support community-based organizations and public works departments or agencies to align water and wastewater utility workforce recruitment efforts, training programs, retention efforts, and community resources with water and wastewater utilities. This fully funds the authorized level for the program in the Drinking Water and Wastewater Infrastructure Act (DWWIA).

Statutory Authority:

42 U.S.C. 300j-19e, AWIA, P.L. 115-270, Section 4304.

Technical Assistance and Grants for Emergencies (SDWA)

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$35,000	\$35,000
Total Budget Authority	\$0	\$0	\$35,000	\$35,000
Total Workyears	0.0	0.0	10.2	10.2

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50101 of DWWIA authorizes EPA to make grants to states or publicly owned water systems to assist in responding to and alleviating any emergency situation (including cybersecurity events and heightened exposure to lead) when the Agency determines that there is a substantial danger to the public health.

FY 2023 Activities and Performance Plan:

Funds are requested in FY 2023 to create this new grant program at EPA.

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$35,000.0 / +10.2 FTE) This program change is an increase that will fully fund the creation of the new grant program under DWWIA at the authorized level. This investment also will fund the administrative cost associated with running this new grant program. This includes \$1.632 million for payroll costs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50101.

Technical Assistance and Grants for Emergencies, Small Systems

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$15,000	\$15,000
Total Budget Authority	\$0	\$0	\$15,000	\$15,000
Total Workyears	0.0	0.0	2.2	2.2

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50101 of DWWIA authorizes EPA to make grants for states or publicly owned water systems to assist in responding to and alleviating any emergency situation at small systems (including cybersecurity events and heightened exposure to lead) when the Agency determines there is a substantial danger to the public health.

FY 2023 Activities and Performance Plan:

Funds are requested in FY 2023 to create this new grant program at EPA.

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$15,000.0 / +2.2 FTE) This program change is an increase that will fully fund the creation of the new grant program under DWWIA at the authorized level. This investment also will fund the administrative cost associated with running this new grant program. This includes \$352.0 thousand for payroll costs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50101.

Source Water Petition Program

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$5,000	\$5,000
Total Budget Authority	\$0	\$0	\$5,000	\$5,000
Total Workyears	0.0	0.0	1.0	1.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50103 of DWWIA authorizes EPA to make grants for states where public water system operators and community members have formed a voluntary partnership to prevent source water degradation.

FY 2023 Activities and Performance Plan:

Funds are requested in FY 2023 to create this new grant program at EPA.

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

• (+\$5,000.0 / +1.0 FTE) This program change is an increase that will fully fund the creation of the new grant program under DWWIA at the authorized level. This investment also will fund the administrative cost associated with running this new grant program. This includes \$160.0 thousand for payroll costs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50103.

Voluntary Connections to Public Water Systems

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$20,000	\$20,000
Total Budget Authority	\$0	\$0	\$20,000	\$20,000
Total Workyears	0.0	0.0	4.0	4.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50104(b) of DWWIA authorizes EPA to establish a new competitive grant program for public water systems (or nonprofit entities on behalf of public water systems) to voluntarily connect individual households to public water systems.

FY 2023 Activities and Performance Plan:

Funds are requested in FY 2023 to create this new grant program at EPA.

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

• (+\$20,000.0 / +4.0 FTE) This program change is an increase that will fully fund the creation of the new grant program under DWWIA at the authorized level. This investment also will fund the administrative cost associated with running this new grant program. This includes \$640.0 thousand for payroll costs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50104(b).

Underserved Communities Grant to Meet SDWA Requirements

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$50,000	\$50,000
Total Budget Authority	\$0	\$0	\$50,000	\$50,000
Total Workyears	0.0	0.0	14.0	14.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50104(c) of DWWIA authorizes EPA to create a new competitive grant program to assist states in helping underserved communities meet Safe Drinking Water Act (SDWA) requirements. Grants will prioritize communities that do not have household drinking water or wastewater services.

FY 2023 Activities and Performance Plan:

Funds are requested in FY 2023 to create this new grant program at EPA.

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in *the FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

• (+\$50,000.0 / +14.0 FTE) This program change is an increase that will fully fund the creation of the new grant program under DWWIA at the authorized level. This investment also will fund the administrative cost associated with running this new grant program. This includes \$2.24 million for payroll costs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50104(c).

Small System Water Loss Identification and Prevention

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$50,000	\$50,000
Total Budget Authority	\$0	\$0	\$50,000	\$50,000
Total Workyears	0.0	0.0	9.0	9.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50106 of DWWIA authorizes EPA to create a new grant program for states, municipalities, water systems, tribes (or consortia), or nonprofit organizations, to assist public water systems that serve fewer than 10,000 people in order to promote operation sustainability. Grantees can use grants for activities such as inventorying or mapping system assets, deploying technology, increasing water reuse, or training staff.

FY 2023 Activities and Performance Plan:

Funds are requested in FY 2023 to create this new grant program at EPA.

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

• (+\$50,000.0 / +9.0 FTE) This program change is an increase that will fully fund the creation of the new grant program under DWWIA at the authorized level. This investment also will fund the administrative cost associated with running this new grant program. This includes \$1.44 million for payroll costs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50106.

Midsize and Large Drinking Water System Infrastructure Resilience and Sustainability

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$50,000	\$50,000
Total Budget Authority	\$0	\$0	\$50,000	\$50,000
Total Workyears	0.0	0.0	10.0	10.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50107 of DWWIA authorizes EPA to create a new grant program for the resilience and sustainability of public water systems serving more than 10,000 people; including projects that increase resilience to natural hazards, cybersecurity vulnerabilities, or extreme weather events. Eligible activities include water conservation and efficiency, infrastructure modification or relocation, desalination, source water protection, energy efficiency, renewable energy, resiliency efforts, cybersecurity measures, or water conservation or reuse.

FY 2023 Activities and Performance Plan:

Funds are requested in FY 2023 to create this new grant program at EPA.

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

• (+\$50,000.0 / +10.0 FTE) This program change is an increase that will fully fund the creation of the new grant program under DWWIA at the authorized level. This investment also will fund the administrative cost associated with running this new grant program. This includes \$1.6 million for payroll costs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50107.

Indian Reservation Drinking Water Program

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$50,000	\$50,000
Total Budget Authority	\$0	\$0	\$50,000	\$50,000
Total Workyears	0.0	0.0	8.0	8.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50111 of DWWIA broadens the Indian reservation drinking water grant program (which has not been appropriated to date) to extend to projects on Indian reservations that connect, expand, or repair existing public water systems, as well as to include Clean Water Act water quality or sanitation projects for treatment works.

FY 2023 Activities and Performance Plan:

Funds are requested in FY 2023 to create this new grant program at EPA.

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

• (+\$50,000.0 / +8.0 FTE) This program change is an increase that will fully fund the creation of the new grant program under DWWIA at the authorized level. This investment also will fund the administrative cost associated with running this new grant program. This includes \$1.28 million for payroll costs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50111.

Advanced Drinking Water Technologies

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$10,000	\$10,000
Total Budget Authority	\$0	\$0	\$10,000	\$10,000
Total Workyears	0.0	0.0	2.9	2.9

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50112 of DWWIA authorizes a new competitive Advanced Drinking Water Technology grant program. Eligible water systems must be smaller than 100,000 people served or must have inadequate drinking water systems and must be interested to identify and deploy new or emerging technologies (including cybersecurity).

FY 2023 Activities and Performance Plan:

Funds are requested in FY 2023 to create this new grant program at EPA.

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

• (+\$10,000.0 / +2.9 FTE) This program change is an increase that will fully fund the creation of the new grant program under DWWIA at the authorized level. This investment also will fund the administrative cost associated with running this new grant program. This includes \$464.0 thousand for payroll costs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50112.

Wastewater Efficiency Grant Pilot Program

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$20,000	\$20,000
Total Budget Authority	\$0	\$0	\$20,000	\$20,000
Total Workyears	0.0	0.0	4.0	4.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50202 of DWWIA authorizes EPA to create a Wastewater Efficiency Grant Program that awards grants to owners or operators of publicly owned treatment works to carry out projects that create or improve waste-to-energy systems.

FY 2023 Activities and Performance Plan:

Funds are requested in FY 2023 to create this new grant program at EPA.

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

Performance Measure Targets:

• (+\$20,000.0 / +4.0 FTE) This program change is an increase that will fully fund the creation of the new grant program under DWWIA at the authorized level. This investment also will fund the administrative cost associated with running this new grant program. This includes \$640.0 thousand for payroll costs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50202.

Clean Water Infrastructure Resiliency and Sustainability Program

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$25,000	\$25,000
Total Budget Authority	\$0	\$0	\$25,000	\$25,000
Total Workyears	0.0	0.0	5.0	5.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50205 of DWWIA authorizes EPA to provide grants to municipality or an intermunicipal, interstate, or state agency for planning, designing, or constructing projects that increase the resilience of publicly owned treatment works to natural hazards or cybersecurity vulnerabilities.

FY 2023 Activities and Performance Plan:

Funds are requested in FY 2023 to create this new grant program at EPA.

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

Performance Measure Targets:

• (+\$25,000.0 / +5.0 FTE) This program change is an increase that will fully fund the creation of the new grant program under DWWIA at the authorized level. This investment also will fund the administrative cost associated with running this new grant program. This includes \$800.0 thousand for payroll costs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50205.

Small and Medium Publicly Owned Treatment Works Circuit Rider Program

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$10,000	\$10,000
Total Budget Authority	\$0	\$0	\$10,000	\$10,000
Total Workyears	0.0	0.0	1.0	1.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50206 of DWWIA authorizes EPA to provide grants to qualified nonprofits to assist owners and operators of small and medium publicly owned treatment works. Grants will prioritize nonprofits that service communities that are overburdened or underserved.

FY 2023 Activities and Performance Plan:

Funds are requested in FY 2023 to create this new grant program at EPA.

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

Performance Measure Targets:

• (+\$10,000.0 / +1.0 FTE) This program change is an increase that will fully fund the creation of the new grant program under DWWIA at the authorized level. This investment also will fund the administrative cost associated with running this new grant program. This includes \$160.0 thousand for payroll costs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50206.

Grants for Low and Moderate income Household Decentralized Wastewater Systems

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$50,000	\$50,000
Total Budget Authority	\$0	\$0	\$50,000	\$50,000
Total Workyears	0.0	0.0	10.0	10.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50208 of DWWIA authorizes EPA to provide grants to nonprofits that provide assistance to low- and moderate-income individuals for the construction, repair, or replacement of an individual household decentralized wastewater treatment system; or the installation of a larger decentralized wastewater system designed to provide treatment for two or more households.

FY 2023 Activities and Performance Plan:

Funds are requested in FY 2023 to create this new grant program at EPA.

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

Performance Measure Targets:

• (+\$50,000.0 / +10.0 FTE) This program change is an increase that will fully fund the creation of the new grant program under DWWIA at the authorized level. This investment also will fund the administrative cost associated with running this new grant program. This includes \$1.6 million for payroll costs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50208.

Connection to Publicly Owned Treatment Works

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$40,000	\$40,000
Total Budget Authority	\$0	\$0	\$40,000	\$40,000
Total Workyears	0.0	0.0	9.0	9.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50209 of DWWIA authorizes EPA to provide grants to publicly owned treatment works or nonprofits that assist individuals with the costs of connecting their household to a publicly owned treatment work.

FY 2023 Activities and Performance Plan:

Funds are requested in FY 2023 to create this new grant program at EPA.

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

Performance Measure Targets:

• (+\$40,000.0 / +9.0 FTE) This program change is an increase that will fully fund the creation of the new grant program under DWWIA at the authorized level. This investment also will fund the administrative cost associated with running this new grant program. This includes \$1.44 million for payroll costs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50209.

Stormwater Infrastructure Technology

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$5,000	\$5,000
Total Budget Authority	\$0	\$0	\$5,000	\$5,000
Total Workyears	0.0	0.0	1.0	1.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50217(b) of DWWIA authorizes EPA to establish a competitive grant program aimed at creating between three and five centers of excellence for new and emerging stormwater control infrastructure technologies.

FY 2023 Activities and Performance Plan:

Funds are requested in FY 2023 to create this new grant program at EPA.

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

Performance Measure Targets:

• (+\$5,000.0 / +1.0 FTE) This program change is an increase that will fully fund the creation of the new grant program under DWWIA at the authorized level. This investment also will fund the administrative cost associated with running this new grant program. This includes \$160.0 thousand for payroll costs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50217(b).

Stormwater Control Infrastructure Project Grants

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$10,000	\$10,000
Total Budget Authority	\$0	\$0	\$10,000	\$10,000
Total Workyears	0.0	0.0	1.0	1.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50217(c) of DWWIA authorizes EPA to establish a competitive grant program for stormwater control infrastructure projects that incorporate new and emerging stormwater control technologies.

FY 2023 Activities and Performance Plan:

Funds are requested in FY 2023 to create this new grant program at EPA.

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

Performance Measure Targets:

• (+\$10,000.0 / +1.0 FTE) This program change is an increase that will fully fund the creation of the new grant program under DWWIA at the authorized level. This investment also will fund the administrative cost associated with running this new grant program. This includes \$160.0 thousand for payroll costs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50217(c).

Alternative Water Sources Grants Pilot Program

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$25,000	\$25,000
Total Budget Authority	\$0	\$0	\$25,000	\$25,000
Total Workyears	0.0	0.0	4.0	4.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50203 of DWWIA authorizes EPA to provide grants to a water authority in the area of a state that is experiencing critical water supply needs, and may be used for engineering, design, construction, and final testing of alternative water source projects to meet critical water supply needs.

FY 2023 Activities and Performance Plan:

Funds are requested in FY 2023 to create this new grant program at EPA.

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

Performance Measure Targets:

• (+\$25,000.0 / +4.0 FTE) This program change is an increase that will fully fund the creation of the new grant program under DWWIA at the authorized level. This investment also will fund the administrative cost associated with running this new grant program. This includes \$640.0 thousand for payroll costs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50203.

Enhanced Aquifer Use and Recharge

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$5,000	\$5,000
Total Budget Authority	\$0	\$0	\$5,000	\$5,000
Total Workyears	0.0	0.0	1.3	1.3

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50222 of DWWIA authorizes EPA to provide grants to carryout groundwater research of enhanced aquifer use and recharge in support of sole-source aquifers.

FY 2023 Activities and Performance Plan:

Funds are requested in FY 2023 to create this new grant program at EPA.

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$5,000.0 / +1.3 FTE) This program change is an increase that will fully fund the creation of the new grant program under DWWIA at the authorized level. This investment also will fund the administrative cost associated with running this new grant program. This includes \$208.0 thousand for payroll costs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50222.

Water Sector Cybersecurity

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$25,000	\$25,000
Total Budget Authority	\$0	\$0	\$25,000	\$25,000

Program Project Description:

Cybersecurity represents a substantial concern for the water sector, given the prevalence of state-sponsored and other malevolent attacks on the sector as well as the sector's inherent vulnerability and limited technical capacity to address cyber issues. The Nation's drinking water and wastewater systems possess limited or no technical capacity to address cybersecurity risks. This competitive grant will help systems establish and build the necessary cybersecurity infrastructure to address rising threats. The Program also will support the Agency's Infrastructure Investment and Jobs Act implementation priorities including preparing for and responding to cybersecurity challenges so that water systems are more resilient.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA is requesting \$25 million for a new competitive Water Sector Cybersecurity Grant Program. This Program will provide grants for cybersecurity improvements to drinking water and wastewater systems. Specifically, grant money will be available to develop and implement programs to proactively mitigate the risk of cybersecurity attacks on drinking water and/or wastewater systems. This grant program would complement potential implementation of proposed amendments to the Safe Drinking Water Act (SDWA) requiring cybersecurity analysis and changes.

It is expected that eligible entities will include water systems serving small, medium, and large communities. Receiving grants could be contingent upon completion of an approved cybersecurity assessment. An approved cybersecurity assessment may include an EPA cybersecurity assessment or a Cybersecurity and Infrastructure Security Agency (CISA) assessment. This grant will complement cybersecurity work already underway at EPA.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$25,000.0) This program change establishes a new competitive grant program to advance cybersecurity infrastructure capacity and protections within the water sector.

Statutory Authority:

Safe Drinking Water Act.

Clean Water Act Research, Investigations, Training, and Information

Program Area: State and Tribal Assistance Grants (STAG) Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$75,000	\$75,000
Total Budget Authority	\$0	\$0	\$75,000	\$75,000
Total Workyears	0.0	0.0	15.0	15.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50201 of DWWIA amends the CWA grant program regarding Research, Investigations, Training, and Information. This program authorizes grants to state water pollution control agencies, interstate agencies, other public or nonprofit private agencies, institutions, organizations, and individuals to conduct and promote the coordination and acceleration of research, investigations, experiments, training, demonstrations, surveys, and studies relating to the causes, effects, extent, prevention, reduction, and elimination of pollution. It also allows for grants to nonprofit organizations in order to provide technical and financial assistance to rural, small, and tribal communities for project planning; assist treatment systems to protect water quality; and provide information to these organizations regarding planning, design, construction, and operation of publicly owned treatment works and decentralized wastewater treatment systems.

FY 2023 Activities and Performance Plan:

Funds are requested in FY 2023 to create this new grant program at EPA.

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

Work under this program supports performance results in the Surface Water Protection Program under the EPM appropriation.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$75,000.0 / +15.0 FTE) This program change is an increase that will fully fund the creation of the new grant program under DWWIA at the authorized level. This investment also will fund the administrative cost associated with running this new grant program. This includes \$2.4 million for payroll costs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50201.

Water Data Sharing Pilot Program

Program Area: State and Tribal Assistance Grants (STAG) Goal: Ensure Clean and Safe Water for All Communities Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
State and Tribal Assistance Grants	\$0	\$0	\$15,000	\$15,000
Total Budget Authority	\$0	\$0	\$15,000	\$15,000
Total Workyears	0.0	0.0	2.0	2.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50213 of DWWIA authorizes EPA to establish a competitive grant pilot program to build systems that improve the sharing of information concerning water quality, water infrastructure needs, and water technology (including cybersecurity) between states or among units of local government.

FY 2023 Activities and Performance Plan:

Funds are requested in FY 2023 to create this new grant program at EPA.

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• (+\$15,000.0 / +2.0 FTE) This program change is an increase that will fully fund the creation of the new grant program under DWWIA at the authorized level. This investment

also will fund the administrative cost associated with running this new grant program. This includes \$320.0 thousand for payroll costs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50213.

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APPROPRIATION: Water Infrastructure Finance and Innovation Fund Resource Summary Table

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Water Infrastructure Finance and				
Innovation Fund				
Budget Authority	\$79,800	\$65,000	\$80,344	\$15,344
Total Workyears	32.8	28.4	40.0	11.6

Bill Language: Water Infrastructure Finance and Innovation Program Account

For the cost of direct loans and for the cost of guaranteed loans, as authorized by the Water Infrastructure Finance and Innovation Act of 2014, \$72,108,000, to remain available until expended: Provided, That such costs, including the cost of modifying Such loans, shall be as defined in section 502 of the Congressional Budget Act of 1974:Provided further, That these funds are available to subsidize gross obligations for the principal amount of direct loans, including capitalized interest, and total loan principal, including capitalized interest, any part of which is to be guaranteed, not to exceed \$12,500,000,000: Provided further, That of the funds made available under this heading, \$5,000,000 shall be used solely for the cost of direct loans and for the cost of guaranteed loans for projects described in section 5026(9) of the Water Infrastructure Finance and Innovation Act of 2014 to State infrastructure financing authorities, as authorized by section 5033(e) of such Act : Provided further, That the use of direct loans or loan guarantee authority under this heading for direct loans or commitments to guarantee loans for any project shall be in accordance with the criteria published in the Federal Register on June 30, 2020 (85FR39189) pursuant to the fourth proviso under the heading "Water Infrastructure Finance and Innovation Program Account" in division D of the Further Consolidated Appropriations Act, 2020 (Public Law 116–94): Provided further, That none of the direct loans or loan guarantee authority made available under this heading shall be available for any project unless the Administrator and the Director of the Office of Management and Budget have certified in advance in writing that the direct loan or loan guarantee, as applicable, and the project comply with the criteria referenced in the previous proviso: Provided further, That, for the purposes of carrying out the Congressional Budget Act of 1974, the Director of the Congressional Budget Office may request, and the Administrator shall promptly provide, documentation and information relating to a project identified in a Letter of Interest submitted to the Administrator pursuant to a Notice of Funding Availability for applications for credit assistance under the Water Infrastructure Finance and Innovation Act Program, including with respect to a project that was initiated or completed before the date of enactment of this Act.

In addition, fees authorized to be collected pursuant to sections 5029 and 5030 of the Water Infrastructure Finance and Innovation Act of 2014 shall be deposited in this account, to remain available until expended.

In addition, for administrative expenses to carry out the direct and guaranteed loan programs, notwithstanding section 5033 of the Water Infrastructure Finance and Innovation Act of 2014, \$8,236,000, to remain available until September 30, 2024.

Note.—A full-year 2022 appropriation for this account was not enacted at the time the Budget was prepared; therefore, the Budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of Public Law 117-43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.

Program Projects in WIFIA

(Dollars in Thousands)

Program Project	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Ensure Clean Water				
Water Infrastructure Finance and Innovation	\$79,800	\$65,000	\$80,344	\$15,344
TOTAL WIFIA	\$79,800	\$65,000	\$80,344	\$15,344

Water Quality Protection

Water Infrastructure Finance and Innovation

Program Area: Ensure Clean Water Goal: Ensure Clean and Safe Water for All Communities Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Water Infrastructure Finance and Innovation Fund	\$79,800	\$65,000	\$80,344	\$15,344
Total Budget Authority	\$79,800	\$65,000	\$80,344	\$15,344
Total Workyears	32.8	28.4	40.0	11.6

Program Project Description:

Communities across the country are seeking affordable financing to update aging water infrastructure. To help address these challenges, Congress enacted the Water Infrastructure Finance and Innovation Act of 2014 (WIFIA).

The WIFIA Program leverages federal funds to finance water infrastructure projects that protect public health and deliver environmental benefits while supporting local economies and creating jobs. As of February 2022, the Program has issued 72 loans to communities across the country totaling over \$13 billion in credit assistance to help finance more than \$28 billion for water infrastructure projects. WIFIA loans for these projects have saved communities nearly \$5 billion, which they can use to accelerate additional infrastructure investment and keep rates affordable for water system users. These WIFIA-financed projects have created over 82,000 jobs and improved water infrastructure affecting over 37 million people. A further 87 projects have been invited to apply for nearly \$14 billion in WIFIA assistance, which will stimulate over \$30 billion in additional infrastructure investments once fully committed through loan agreements. WIFIA credit assistance is an effective tool to help communities nationwide address water infrastructure needs.

The WIFIA Program provides and services direct loans to cover up to 49 percent of eligible costs for water infrastructure projects of regional or national significance and up to 80 percent of eligible costs for small community borrowers starting with the FY 2021 appropriation. The program supports a broad borrower base, including underserved communities, private companies, and small towns. WIFIA complements the existing State Revolving Fund programs as an additional source of low-cost capital to help meet the growing water infrastructure needs of the United States and address key national infrastructure priorities. It provides financing for the rehabilitation and construction of water, wastewater, and stormwater systems to address aging infrastructure, meet regulatory requirements, and help improve communities' long-term strategic, financial, and climate resiliency planning.

The WIFIA Program provides flexible terms for credit assistance and low interest rates which stimulate investment while minimizing costs for ratepayers. Terms include the option to capitalize interest, backload repayment, and methods that preserve senior debt capacity.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan.

The FY 2023 request builds on the Program's success accelerating water infrastructure investment and enables the program to continue to offer support for small, overburdened, and underserved communities. The requested \$80 million-- including \$72 million in credit subsidy, will enable EPA to provide up to \$8 billion in direct credit assistance, which when combined with other funding sources could help sustain over \$16 billion in total infrastructure investment.

Of the total \$80 million request to implement the program, \$8 million is for EPA's management and operation administrative expenses, including contract support and associated program payroll. The requested funding level, coupled with the fee expenditure authority, allows EPA to undertake the independent aspects of loan intake and origination; project technical evaluation, including credit review, engineering feasibility review, and loan term negotiation; risk management; portfolio management and surveillance; and loan servicing.

The FY 2023 budget request also includes authority to use fee revenue as outlined in the Water Resources Reform and Development Act, Sections 5029(a), 5030 (b), and 5030(c). The revenue is for the cost of contracting with expert services such as financial advisory, legal advisory, and engineering firms. The fee expenditure authority for the Program is in addition to the \$8 million request for management and operations administrative expenses.

Sufficient management and operation funding levels allow the credit subsidy to finance a high level of infrastructure investment. High quality underwriting and technical reviews allow EPA to properly mitigate risk, which in turn allows the credit subsidy to support a greater number of projects. Additionally, high quality portfolio monitoring, and management is critical to ensuring the Program's long-term solvency. These activities will help work toward meeting targets as part of the Justice40 pilot program.

Performance Measure Targets:

PM INFRA-01) Billions of non-federal dollars leveraged by EPA's water	FY 2022 Target	FY 2023 Target
infrastructure finance programs (CWSRF, DWSRF and WIFIA).	9	9

⁷²⁸For more information see EPA Fee Rule: https://www.federalregister.gov/documents/2017/06/28/2017-13438/fees-for-water-infrastructure-project-applications-under-wifia

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

- (+\$298.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,438.0 / +11.6 FTE) This program change is an increase to support operational administrative resources needed to maintain the program's pace and quality of service to its borrowers. This investment includes \$2.12 million in payroll.
- (+\$12,608.0) This increase in credit subsidy resources reflects the growing demand for WIFIA loans from communities.

Statutory Authority:

Water Infrastructure Finance and Innovation Act of 2014.

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APPROPRIATION: Hazardous Waste Electronic Manifest System Fund Resource Summary Table

(Dollars in Thousands)

Hazardous Waste Electronic Manifest System Fund	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Budget Authority	\$21,652	\$0	\$0	\$0
Total Workyears	11.7	11.0	11.0	0.0

Bill Language: E-Manifest

The Administrator of the Environmental Protection Agency is authorized to collect and obligate fees in accordance with section 3024 of the Solid Waste Disposal Act (42 U.S.C. 6939g) for fiscal year 2023, to remain available until expended.

Note. — This language is proposed under the FY 2023 Administrative Provisions.

Program Projects in e-Manifest

(Dollars in Thousands)

				FY 2023 President's
		FY 2022	FY 2023	Budget v.
	FY 2021	Annualized	President's	FY 2022 Annualized
Program Project	Final Actuals	CR	Budget	CR
Resource Conservation and Recovery Act				
(RCRA)				
RCRA: Waste Management	\$21,498	\$0	\$0	\$0
Operations and Administration				
Central Planning, Budgeting, and				
Finance	\$154	\$0	\$0	\$0
TOTAL e-Manifest	\$21,652	\$0	\$0	\$0

Resource Conservation and Recovery Act (RCRA)

RCRA: Waste Management

Program Area: Resource Conservation and Recovery Act (RCRA)
Goal: Safeguard and Revitalize Communities
Objective(s): Reduce Waste and Prevent Environmental Contamination

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Environmental Programs & Management	\$59,769	\$70,465	\$79,743	\$9,278
Hazardous Waste Electronic Manifest System Fund	\$21,498	\$0	\$0	\$0
Total Budget Authority	\$81,267	\$70,465	\$79,743	\$9,278
Total Workyears	286.5	296.8	324.8	28.0

Total workyears in FY 2023 include 11.0 FTE funded by e-Manifest fees.

Program Project Description:

The Resource Conservation and Recovery Act requires companies that ship hazardous waste to track and report the estimated two million shipments each year. On June 30, 2018, EPA launched a national system for tracking hazardous waste shipments electronically. The system, known as "e-Manifest," was developed per the Hazardous Waste Electronic Manifest Establishment Act (e-Manifest Act, Public Law 112-195), enacted on October 5, 2012. e-Manifest modernizes the Nation's cradle-to-grave hazardous waste tracking process while saving valuable time, resources, and dollars for industry and states. Since system launch through July 2021, EPA has received approximately 6.5 million manifests and collected over \$76 million in user fees.

EPA estimates the e-Manifest system will reduce the burden associated with paper manifests by between 175,000 and 425,000 hours, saving state and industry users more than \$50 million annually, once electronic manifests are widely adopted. Since the 2018 launch, e-Manifest has saved state programs over \$50 million dollars in processing, data entry, and storage costs. The e-Manifest system will provide better knowledge of waste generation and final disposition; enhanced access to manifest information; and greater transparency for the public about hazardous waste shipments.

In FY 2014, Congress established the "Hazardous Waste Electronic Manifest System Fund" to implement the e-Manifest Program, including system development, fee collection authority, rulemaking, and advisory committee establishment. In FY 2023, e-Manifest continues to be fully supported by user fees, which includes support for continuing the development and operation of the system and agency personnel that support its use and further its implementation.

⁷²⁹ For more information, please refer to: https://www.epa.gov/e-manifest/learn-about-hazardous-waste-electronic-manifest-system-e-manifest.

FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.2, Reduce Waste and Prevent Environmental Contamination in the FY 2022 - 2026 EPA Strategic Plan.

In FY 2023, EPA will operate the e-Manifest system and will collect and deposit user fees into the Hazardous Waste Electronic Manifest System Fund (approximately \$26.6 million is anticipated). The authority to collect and spend fees requires authorization from Congress in annual appropriations bills.

In FY 2023, EPA plans to perform the following key activities:

- Continue to implement and enhance electronic signature methods that will ease the logistical burdens of adopting greater use of the electronic and image plus data submission methods.
- Work with individual generators and generator-associated groups to increase their registration and use of the e-Manifest system, which will allow for greater fully electronic adoption.
- Continue analysis of the application of e-Manifest for exports and TSCA requirements to leverage greater use of e-Manifest and achieve efficiencies.
- Continue regular outreach with users and stakeholders to identify new ways to improve the e-Manifest system. This includes regular webinars and targeted demonstrations on how to use the e-Manifest system.
- Operate appropriate accounting and financial reporting interfaces needed to collect and manage user fees, adjust fees as appropriate, and comply with the auditing requirements of the Hazardous Waste Electronic Manifest Establishment Act.
- Hold periodic meetings of the e-Manifest Advisory Board, consisting of state and industry stakeholders and Information Technology experts, to provide input on system operation and implementation of the user fee regulation.
- Develop and enhance the e-Manifest system software to expand developmental capabilities, increase ease of use, and improve program efficiencies.

Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):

• There is no change in program funding.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) and the Hazardous Waste Electronic Manifest Establishment Act.

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FY 2023 Performance Measures

GOAL 1: TACKLE THE CLIMATE CRISIS—Cut pollution that causes climate change and increase the adaptive capacity of Tribes, states, territories, and communities.

Objective 1.1: Reduce Emissions that Cause Climate Change—Aggressively reduce the emissions of greenhouse gases from all sectors while increasing energy and resource efficiency and the use of renewable energy.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM HFC) Remaining U.S. consumption of hydrofluorocarbons (HFCs).	273.5	273.5	MMTCO ₂ e	Below Target

Metric Details: This measure tracks U.S. consumption of HFCs in million metric tons of carbon dioxide equivalent (MMTCO₂e). HFCs are potent greenhouse gases, many of which have global warming potentials hundreds to thousands of times that of carbon dioxide. The American Innovation and Manufacturing (AIM) Act provides EPA the domestic authority to phase down production and consumption of HFCs. HFCs are commonly used in many sectors of the economy, including in refrigeration and air conditioning, aerosols, solvents, fire suppression, and as foam blowing agents. The AIM Act provides the legal framework to phase down HFC production and consumption consistent with the Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol). Phasing down HFCs globally is expected to avoid up to 0.5° Celsius of global warming by 2100. The baseline is 303.9 tons of MMTCO₂e.

Long-Term Performance Goal: By September 30, 2026, promulgate final rules to reduce greenhouse gas (GHG) emissions from light duty, medium-duty, and heavy-duty vehicles; electric utility generating units; and the oil and gas industry.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM RUL) Number of final rules issued that will reduce GHG emissions from light duty, medium-duty, and heavy-duty vehicles; electric utility generating units; and the oil and gas industry.	No Target Established	No Target Established	Rules	Above Target

Metric Details: This measure tracks the number of final rules that will reduce GHG emissions published in the Federal Register. EPA will reduce emissions that cause climate change through regulations on GHG emissions including carbon dioxide (CO₂) and methane from light duty, medium-duty, and heavy-duty vehicles; electric utility generating units; and the oil and gas industry.

Long-Term Performance Goal: By September 30, 2026, EPA's climate partnership programs will reduce expected annual greenhouse gas (GHG) emissions by 545 million metric tons of carbon dioxide equivalent (MMTCO₂e). EPA's climate partnership programs reduced 518.6 MMTCO₂e of annual GHG emissions in 2019.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM CPP) Million metric tons of carbon dioxide equivalent reduced annually by EPA's climate partnership programs.	486.9	500.7	MMTCO ₂ e	Above Target

Metric Details: This measure tracks GHG reductions from EPA's climate partnership programs. The programs included are: ENERGY STAR products and homes program, buildings program, and industrial program; Green Power Partnership; AgSTAR Program; Coalbed Methane Outreach Program; Landfill Methane Outreach Program; Natural Gas STAR / Methane Challenge Programs; SF6 Emission Reduction Partnerships for Electric Power Systems; Responsible Appliance Disposal; GreenChill; and SmartWay. These programs work hand-in-hand with the private sector and others to achieve more than would be possible through federal regulations alone. These programs seek out and overcome market barriers, drive policy at the state and local level, and capture and channel marketplace ingenuity towards climate action. EPA's partnership programs avoided 518.6 MMTCO2e in 2019. For more information on U.S. GHG emissions, see: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks.

Other Core Work

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM CRT) Number of certificates of conformity issued that demonstrate that the				Above
respective engine, vehicle, equipment, component, or system conforms to all applicable	4,700	4,700	Certificates	Target
emission requirements and may be entered into commerce.				raiget

Metric Details: This measure tracks the number of certificates of conformity issued in a given year. The Clean Air Act (CAA) requires that engines, vehicles, equipment, components, or systems receive a certificate of conformity which demonstrates compliance with the applicable requirements prior to introduction to U.S. commerce. EPA reviews all submitted requests and issues certificates of conformity when the manufacturer demonstrates compliance with all applicable requirements. This measure illustrates EPA's annual certification workload. The number of certification requests is determined by the product planning of manufacturers and will fluctuate from year to year. EPA strives to issue vehicle and engine certificates of conformity in a timely manner and in pace with the numbers of requests received.

(PM REP) Percentage of Annual Greenhouse Gas Emission Reports verified by EPA	98	08	Percent	Above
before publication.		96		Target

Metric Details: The Greenhouse Gas Reporting Program, established in 2009, has 41 sectors that account for more than 8,100 reports summarizing annual GHG emissions and supply. Both facilities and suppliers are required to report their data annually by March 31st. After submission of the data, EPA conducts a verification review that lasts approximately 150 days and includes a combination of electronic checks, staff review, and

follow-up with facilities to identify potential reporting errors that are corrected before publication. The 150-day period includes 60 days for EPA to review reports and identify potential data quality issues, 75 days for reporters to resolve these issues, and 15 days for EPA to review responses or resubmitted reports. EPA typically publishes the data by early October each year (see: www.epa.gov/ghgreporting). This data supports federal and state-level policy development and allows EPA to share GHG emissions and supply data with industry stakeholders, state and local governments, academia, the research community, and the public in general.

(PM RD3) Percentage of ORD climate-related research products meeting partner needs.	93	94	Percent	Above Target
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Metric Details: Partner satisfaction is evaluated through a robust survey process. The annual survey engages key users of EPA Office of Research and Development (ORD) products. Survey respondents evaluate the scientific rigor of research products (quality), product relevance (usability), and timeliness of product delivery. This measure will evaluate a subset of ORD's research products specifically related to climate.

Objective 1.2: Accelerate Resilience and Adaptation to Climate Change Impacts—Deliver targeted assistance to increase the resilience of Tribes, states, territories, and communities to the impacts of climate change.

Long-Term Performance Goal: By September 30, 2026, implement all priority actions in EPA's Climate Adaptation Action Plan and the 20 National Program and Regional Climate Adaptation Implementation Plans to account for the impacts of the changing climate on human health and the environment.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM AD07) Number of priority actions completed in EPA's Climate Adaptation	100	100	Priority	Above
Action Plan and Program and Regional Implementation Plans.		100	Actions	Target

Metric Details: This measure tracks the number of priority actions implemented in support of EPA's October 2021 Climate Adaptation Action Plan through the 20 Program and Regional Implementation Plans. The Plan commits EPA to five Priority Actions per year by each of EPA's 10 national program offices and 10 regional offices. EPA will publish a report annually to share completed actions, accomplishments, and challenges. EPA expects 100 actions per year for a total of 500 actions by FY 2026. The Implementation Plans identify EPA's specific Priority Actions to: 1) integrate climate adaptation planning into EPA programs, policies and rulemaking processes; 2) consult and partner with tribes, states, territories, local governments, environmental justice organizations, community groups, businesses and other federal agencies to strengthen adaptive capacity and increase the resilience of the nation, with a particular focus on advancing environmental justice; 3) implement measures to protect the Agency's workforce, facilities, critical infrastructure, supply chains and procurement processes from the risks posed by climate change; and 4) modernize EPA financial assistance programs to encourage climate-resilient investments across the nation.

(PM AD08) Number of EPA national program offices that have developed adaptation	4	10	Program	Above
training for programs and staff.	4	10	Offices	Target

Metric Details: This measure tracks the development of training by EPA's national program offices on how current and future climate impacts should be considered in specific program activities, such as direct program implementation, regulation development, permitting, inspections, enforcement, partnerships, research, grants, loans, and technical assistance. EPA currently has a training developed for new employees. Offices

with existing training will update their materials in 2022 and offices without existing training will create them for FY 2023. Ten total trainings reflect nine national program office trainings plus one general climate adaptation training offered by Office of Policy.

Long-Term Performance Goal: By September 30, 2026, assist at least 400 federally recognized Tribes to take action to anticipate, prepare for,

adapt to, or recover from the impacts of climate change.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM AD09) Cumulative number of federally recognized tribes assisted by EPA to take action to anticipate, prepare for, adapt to, or recover from the impacts of climate	100	150	Tribes	Above Target
change.				

Metric Details: This measure tracks the cumulative number of federally recognized tribes EPA provides with financial assistance, technical assistance, or training that then take action to anticipate, prepare for, adapt to, or recover from the impacts of climate change starting in FY 2022. Actions may include but are not limited to: developing a climate adaptation plan; identifying potential impacts; assessing vulnerability; planning; applying for additional funding; adoption of adaptation measures such as green infrastructure; improved coordination with other key organizations (e.g., a state or federal partner); estimation of financial impacts; or more effective remedy selection in a hazardous waste cleanup program.

Long-Term Performance Goal: By September 30, 2026, assist at least 450 states, territories, local governments, and communities, especially communities that are underserved and disproportionately at risk from climate change, to take action to anticipate, prepare for, adapt to, or recover from the impacts of climate change.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM AD10) Cumulative number of states, territories, local governments, and				Above
communities (i.e., EPA partners) assisted by EPA to take action to anticipate, prepare	250	300	Partners	Target
for, adapt to, or recover from the impacts of climate change.				Target

Metric Details: This measure tracks the cumulative number of states, territories, local governments, and communities EPA provides with financial assistance, technical assistance, or training that then take action to anticipate, prepare for, adapt to, or recover from the impacts of climate change starting in FY 2022. Actions may include but are not limited to: developing a climate adaptation plan; identifying potential impacts; assessing vulnerability; planning; applying for additional funding; adoption of adaptation measures such as green infrastructure; improved coordination with other key organizations (e.g., a state or federal partner); estimation of financial impacts; or more effective remedy selection in a hazardous waste cleanup program.

(PM AD11) Number of tribal, state, regional, and/or territorial versions of the Climate Change Adaptation Resource Center (ARC-X) or similar systems developed by universities with EPA support.	3	6	Versions	Above Target
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Metric Details: This measure tracks the development of ARC-X or similar systems developed by universities to support tribal, state, regional, and/or territorial partners. A system has been developed when it is published by the university. These systems support locally specific climate

adaptation information and include local examples and case studies. The information provided in these resource centers will help communities understand and prepare for the impacts of climate change. In addition, regional or local systems may expand resources to encompass the full breadth of climate adaptation issues, even those beyond EPA's mission. These systems will eventually create a learning network of information that is accessible to communities of a variety of sizes and capabilities across the country, especially those with environmental justice concerns. ARC-X is an interactive EPA online resource designed to help local government officials in communities across the United States anticipate, prepare for, adapt to, and recover from the impacts of climate change. It also is a portal to all EPA tools and resources on climate adaptation. ARC-X provides users with an integrated package of information tailored specifically to their needs, based on where they live and the issues of concern to them. The system is available at: https://www.epa.gov/arc-x.

(PM AD12) Hours of appropriate subject matter expert time provided by EPA to help communities adapt to climate impacts, build long-term resilience, and support the most underserved and vulnerable communities after federally declared disasters.	No Target Established	No Target Established	Hours	N/A
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Metric Details: This measure tracks EPA contributions to supporting local communities' efforts to rebuild in a manner that increases community resiliency and adaptive capacity as they recover from federally declared disasters. This does not include clean-up or immediate response activities, but rather supports communities to build back in ways that help anticipate, prepare for, and adapt to climate change. There are no targets for this measure as the number of federal declared disasters where EPA assistance is requested varies by year.

Objective 1.3: Advance International and Subnational Climate Efforts—Collaborate with Tribal, state, local, and international partners and provide leadership on the global stage to address climate change.

Long-Term Performance Goal: By September 30, 2026, implement at least 40 international climate engagements that result in an individual partner commitment or action to reduce greenhouse gas (GHG) emissions, adapt to climate change, or improve resilience in a manner that promotes equity.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction	
(PM E13a) Number of climate engagements that result in an individual partner commitment or action to reduce GHG emissions, adapt to climate change, or improve	8	10	Engage-	Above Target	
resilience in a manner that promotes equity.	8		ments		

Metric Details: This measure tracks the number of senior level EPA international actions implemented annually that result in the provision of tools that when utilized by partners can result in equitable GHG emissions reductions, adaptation to climate change, or improvements in resilience. Climate change is a global issue that has far-reaching human health, social, economic, and biodiversity impacts on our planet, with direct adverse effects in the United States. EPA represents the U.S. Government in climate-related multilateral meetings and treaty negotiations, such as Montreal Protocol, UNFCCC, G7 and G20 Environment Ministers meetings. EPA also works directly with other countries and stakeholders through bilateral agreements and work plans to share technical expertise, implement capacity building, and help countries address their climate gaps.

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Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM E13b) Number of Border 2025 actions implemented in the U.SMexico Border area to improve water quality, solid waste management and air quality including those that address climate change, and advance emergency response efforts.	3	10	Actions	Above Target

Metric Details: This measure tracks EPA actions to provide tools and capacity building activities that when utilized by partners can result in improved water quality, solid waste management and air quality. These include actions to address climate change and advance emergency response efforts along the two thousand mile border between the United States and Mexico.

GOAL 2: TAKE DECISIVE ACTION TO ADVANCE ENVIRONMENTAL JUSTICE AND CIVIL RIGHTS—Achieve tangible progress for historically overburdened and underserved communities and ensure the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income in developing and implementing environmental laws, regulations, and policies.

Objective 2.1: Promote Environmental Justice and Civil Rights at the Federal, Tribal, State and Local Levels—Empower and build capacity of underserved and overburdened communities to protect human health and the environment.

Long-Term Performance Goal: By September 30, 2026, all EPA programs that seek feedback and comment from the public will provide capacity-building resources to communities with environmental justice concerns to support their ability to meaningfully engage and provide useful feedback to those programs.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM EJCR01) Percentage of EPA programs that seek feedback and comment from the public that provide capacity-building resources to communities with environmental justice concerns to support their ability to meaningfully engage and provide useful feedback to those programs.		40	Percent	Above Target

Metric Details: This measure tracks the percentage of EPA programs providing capacity building resources (e.g., fact sheets, trainings, webinars, dedicated technical assistance, grants) to members of communities to support their ability to provide meaningful feedback to the program during engagement. Each program will determine how to provide this support. In FY 2022, EPA will define which programs are included and the range of resources that qualify as capacity building. Tracking will consist of ensuring that each program provides effective support to communities.

(PM EJCR02) Percentage of EPA programs utilizing extramural vehicles to			Abovo
compensate organizations and individuals representing communities with	75	Percent	Above Target
environmental justice concerns when engaged as service providers for the Agency.			Target

Metric Details: This measure tracks the percentage of EPA programs associated with the overall Long-Term Performance Goal that provide financial resources to organizations and individuals engaged as service providers for activities such as organizing, educating, and engaging communities. This can be achieved through use of financial assistance instruments and/or an overall Agency procurement vehicle or vehicles crafted by the EPA Office of Environmental Justice or each program depending upon the principal purpose of the financial transaction. As part of our decision-making processes or other Agency work streams, EPA programs regularly rely upon the time, efforts, and expertise of community members, leaders, and organizations for a variety of activities/inputs. EPA programs that rely on such community support will also provide compensation to those community members/organizations for their time, efforts, and expertise just as they would if they needed the time and expertise of a scientist or engineer. In FY 2022, EPA will work to create a menu of different possibilities for offering paid internships, will put systems in place to track this effort, and will develop outreach materials and resources for interns.

(PM EJCR03) Percentage of environmental justice grantees whose funded projects result in a governmental response.

No Target Established

Percent Above Target

Metric Details: This measure tracks the percentage of environmental justice grantees whose EPA-funded projects result in a governmental response (planned and/or actualized). The governmental response can range from on-the-ground response/activity to a policy change, and it may be at the local, state, tribal, or federal level. Tracking this measure will require incorporation of expectations for reporting into grant solicitations and agreements, and sufficient time post-award for results to materialize.

Long-Term Performance Goal: By September 30, 2026, include commitments to address disproportionate impacts in all written agreements between EPA and Tribes and states (e.g., grant work plans) implementing delegated authorities.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM EJCR04) Percentage of written agreements between EPA and tribes or states implementing delegated authorities that include commitments to address disproportionate impacts.		25	Percent	Above Target

Metric Details: This measure tracks the percentage of formal agreements between EPA and institutions that are authorized or hold delegated authorities that incorporate explicit terms and/or conditions for recipients to be accountable for addressing disproportionate impacts. In FY 2022, EPA will determine the scope of written agreements to be covered (e.g., Performance Partnership Agreements, Memoranda of Understanding, Interagency Agreements) as well as what will qualify as a commitment.

(PM EJCR05) Percentage of state-issued permits reviewed by EPA that include terms			Abovo
and conditions that are responsive to environmental justice concerns and comply with	TBD	Percent	Above
civil rights obligations.			Target

Metric Details: This measure tracks the percentage of state-issued permits reviewed by EPA that are explicitly responsive to environmental justice concerns and comply with civil rights obligations. Achievement of this measure will be pursued through the provision of clear guidance, training, and support by EPA programs to states and other partners. In FY 2022, EPA will develop the method and tracking mechanism necessary to track environmental justice and civil rights responsiveness in state-issued permits and what does or does not qualify for inclusion.

Long-Term Performance Goal: By September 30, 2026, EPA programs with direct implementation authority will take at least 100 significant actions that will result in measurable improvements in Indian country.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction	
(PM E21) Number of significant actions taken by EPA programs with direct implementation authority that will result in measurable improvements in Indian country.	No Target Established	25	Significant Actions	Above Target	

Metric Details: This measure tracks number of significant actions by EPA direct implementation programs that will assist EPA in meeting federal trust responsibilities and provide for equitable program implementation in Indian country. Significant actions are those actions taken on an annualized basis by an EPA program to achieve four significant direct implementation program priorities: training on direct implementation for EPA staff; contributing to an Agency direct implementation report identifying barriers and making recommendations; making EPA direct implementation federal facility and entity data available on EPA's environmental justice mapping and screening tool EJScreen; and identifying actions taken to improve EPA direct implementation and progress made to remove direct implementation barriers.

Long-Term Performance Goal: By September 30, 2026, all state recipients of EPA financial assistance will have foundational civil rights programs in place.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM EJCR06) Percentage of elements completed by state recipients of EPA financial assistance toward having foundational civil rights programs in place.	20	40	Percent	Above Target

Metric Details: This measure tracks state adoption of foundational civil rights programs, calculated as the percentage of 12 "Critical Nondiscrimination Process Points" identified in EPA's Checklist for Nondiscrimination Program technical assistance document (https://www.epa.gov/sites/default/files/2020-02/documents/procedural_safeguards_checklist_for_recipients_2020.01.pdf) met in the aggregate by state recipients of EPA financial assistance multiplied by the 12 process points). EPA provides guidance, tools, training, and enhanced civil rights enforcement to encourage EPA financial assistance recipients at the state agency level to implement foundational nondiscrimination programs, as required by federal law and EPA's nondiscrimination regulation, to ensure civil rights compliance and facilitate meaningful access for communities to state recipients' programs and activities.

(PM EJCR07) Percentage of EPA national program and regional offices that extend			Abovo
paid internships, fellowships, or clerkships to college students from diverse	50	Percent	Above Target
backgrounds.			Target

Metric Details: This measure tracks the percentage of EPA national programs and regions that have dedicated funding and developed a pathway or used an agencywide pathway to bring college students into the Agency on paid internships, fellowships, or clerkships. Special emphasis will be placed on recruitment from the nation's Historically Black Colleges and Universities, Minority Serving Institutions, and Tribal and Indigenous educational institutions.

Long-Term Performance Goal: By September 30, 2026, increase by 40% the number of Office of Research and Development (ORD) activities related to environmental justice that involve or are applicable to Tribes, states, territories, local governments, and communities.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM RD2) Number of ORD activities related to environmental justice that involve or are designed to be applicable to tribes, states, territories, local governments, and communities.	No Target Established	TBD	Activities	Above Target

Metric Details: This measure tracks the number of ORD activities that involved communities or are designed to be applicable to tribes, states, territories, local governments, and communities with environmental justice concerns. ORD activities are funded or conducted by ORD. An activity is considered to involve a tribe, state, territory, local government, or community if ORD engages with or consults the affected entity (or entities) on the specific activity. An activity is considered to be applicable to a tribe, state, territory, local government, or community if the activity may be used by the entity (or entities) for the benefit of a community (or communities) with environmental justice concerns. The baseline and FY 2023 target will be established in FY 2022.

(PM RD4) Percentage of ORD environmental justice-related research products	93	94	Percent	Above Target
meeting partner needs.				Target

Metric Details: Partner satisfaction is evaluated through a robust survey process. The annual survey engages key users of ORD products. Survey respondents evaluate the scientific rigor of research products (quality), product relevance (usability), and timeliness of product delivery. This measure will evaluate a subset of ORD's research products specifically related to environmental justice.

Objective 2.2: Embed Environmental Justice and Civil Rights into EPA's Programs, Policies, and Activities—Integrate environmental justice and civil rights in all the Agency's work to maximize benefits and minimize impacts to underserved and overburdened communities.

Long-Term Performance Goal: By September 30, 2026, reduce disparities in environmental and public health conditions represented by the indicators identified through the FY 2022-2023 Agency Priority Goal.

Annual Performance Goal

For FY 2022 and FY 2023, progress on this Long-Term Performance Goal will be tracked under the Agency Priority Goal "Deliver tools and metrics for EPA and its Tribal, state, local, and community partners to advance environmental justice and external civil rights compliance."

Long-Term Performance Goal: By September 30, 2026, 80% of significant EPA actions with environmental justice implications will clearly demonstrate how the action is responsive to environmental justice concerns and reduces or addresses disproportionate impacts.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM EJCR08) Percentage of significant EPA actions with environmental justice implications that respond to environmental justice concerns and reduce or address disproportionate impacts.		40	Percent	Above Target

Metric Details: This measure tracks the percentage of significant EPA actions with environmental justice implications that respond to environmental justice concerns and reduce or address disproportionate impacts. In FY 2022, EPA will establish: 1) the definition and scope of "significant actions with environmental justice implications" (e.g., rules and permits issued by EPA) and 2) what qualifies as "responsiveness to environmental justice" within the action (e.g., linkages to results of environmental justice analyses, feedback from engagement, National Environmental Justice Advisory Committee (NEJAC) recommendations, performance of equity screens). These definitions will be accompanied by establishment of a tracking system and expectations.

(PM EJCR09) Percentage of programs that have developed clear guidance on the use of justice and equity screening tools.

Above Target

Metric Details: This measure tracks the percentage of EPA programs that have developed written guidance on how their programs use environmental justice screening tools. Guidance will be explicitly for use by staff of that program – in headquarters offices and related regional divisions – and be made available publicly for awareness and implementation by regulatory partners. In FY 2022, EPA will be to determine the universe of programs and what qualifies as "written guidance."

Long-Term Performance Goal: By September 30, 2026, all EPA programs that work in and with communities will do so in ways that are community-driven, coordinated and collaborative, support equitable and resilient community development, and provide for meaningful involvement and fair treatment of communities with environmental justice concerns.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM EJCR10) Percentage of EPA programs that work in and with communities that do so in ways that are community-driven, coordinated and collaborative, support equitable and resilient community development, and provide for meaningful involvement and fair treatment of communities with environmental justice concerns.		TBD	Percent	Above Target

Metric Details: This measure tracks the percentage of EPA programs that integrate the Key Principles for Community Work (community-driven, coordinated, and collaborative) into core functions (e.g., regulatory development, permitting, enforcement). This approach will allow EPA to operate across programs to support projects based on community need rather than operating exclusively in programmatic silos. In FY 2022, EPA will define the universe of programs to be included and what qualifies as working in alignment with this method. The baseline and FY 2023 target will be established in FY 2022.

(PM EJCR11) Number of established EJ collaborative partnerships utilizing the Key	TBD	Doutnoughing	Above
Principles for Community Work (community-driven, coordinated, and collaborative).	IDD	Partnerships	Target

Metric Details: This measure tracks the number of collaborative partnerships in communities supported and participated in by EPA utilizing the Key Principles for Community Work (community-driven, coordinated and collaborative). In FY 2022, the Agency's Community Driven Solutions team led by EPA's Office of Community Revitalization and Office of Environmental Justice will develop reporting criteria for the Agency on the effectiveness in implementing the Key Principles in communities within which the Agency is working and/or supporting. The baseline and FY 2023 target will be established in FY 2022.

Long-Term Performance Goal: By September 30, 2026, all EPA programs and regions will identify and implement areas and opportunities to integrate environmental justice considerations and achieve civil rights compliance in their planning, guidance, policy directives, monitoring, and review activities.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM EJCR12) Percentage of EPA programs and regions that have identified and implemented opportunities to integrate environmental justice considerations and strengthen civil rights compliance in their planning, guidance, policy directives, monitoring, and review activities.	15	30	Percent	Above Target

Metric Details: This measure tracks EPA's efforts to ensure that its national programs and regional offices are identifying opportunities to integrate environmental justice considerations and strengthen civil rights compliance by recipients of EPA financial assistance; and then incorporating those opportunities and areas into strategic planning, guidance, policy directives, monitoring, and review activities. These opportunities might include regional office review of and recommendations on state permitting actions. In FY 2022, each national program and regional office will complete the task of identifying areas and opportunities for environmental justice considerations and civil rights compliance in their planning and policy directives.

(PM EJCR13) Percentage of EPA regions and national programs that have established			Above
clear implementation plans for Goal 2 commitments relative to their policies,	100	Percent	Above
programs, and activities and made such available to external partners.			Target

Metric Details: This measure tracks the percentage of EPA national program and regional offices that publish clear written implementation plans or guidance on the concrete steps necessary to fully implement FY 2022-2026 EPA Strategic Plan Goal 2 commitments to integrate environmental justice and comply with civil rights throughout the implementation of their policies, programs, and activities. EPA program and regional offices will work from the forthcoming Environmental Justice and External Civil Rights National Program Guidance. In FY 2022, EPA will develop guidance for Goal 2 implementation plans.

Long-Term Performance Goal: By September 30, 2026, all EPA programs and regions will implement program and region-specific language assistance plans.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM EJCR14) Percentage of EPA programs and regions that have implemented program and region-specific language assistance plans.	30	60	Percent	Above Target

Metric Details: This measure tracks the percentage of EPA national program and regional offices that develop and implement plans and procedures, consistent with EPA Order 1000.32, "Compliance with Executive Order 13166: Improving Access to Services for Persons with Limited English Proficiency." The Order outlines necessary steps the Agency will take to provide meaningful language access to persons with limited English proficiency. Program and regional office plans and procedures will ensure that every EPA community outreach and engagement activity considers the needs of community members with limited English proficiency and that EPA secures the language services necessary to provide "meaningful access" to EPA programs and activities for individuals with limited English proficiency. EPA Order 1000.32 is available at: https://www.epa.gov/sites/default/files/2017-03/documents/epa order 1000.32 compliance with executive order 13166 02.10.2017.pdf.

Long-Term Performance Goal: By September 30, 2026, all EPA programs and regions will implement program and region-specific disability access plans.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM EJCR15) Percentage of EPA programs and regions that have implemented		60	Percent	Above
program and region-specific disability access plans.		60	1 Clecht	Target

Metric Details: This measure tracks the percentage of EPA national program and regional offices that develop and implement plans and procedures, consistent with guidance and an EPA Order to be issued in FY 2023 to ensure meaningful access to EPA programs and activities for persons with disabilities. Program and regional office plans and procedures will ensure every EPA community outreach and engagement activity considers the needs of persons with disabilities and that EPA provides persons with disabilities reasonable accommodations and appropriate auxiliary aids and services where necessary so they may effectively participate in EPA program and activities.

Objective 2.3: Strengthen Civil Rights Enforcement in Communities with Environmental Justice Concerns—Strengthen enforcement of and compliance with civil rights laws to address the legacy of pollution in overburdened communities.

Long-Term Performance Goal: By September 30, 2026, initiate 45 proactive post-award civil rights compliance reviews to address discrimination issues in environmentally overburdened and underserved communities.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM EJCR16) Number of proactive post-award civil rights compliance reviews initiated to address discrimination issues in environmentally overburdened and underserved communities.	3	6	Compliance Reviews	Above Target

Metric Details: This measure tracks EPA's civil rights enforcement efforts through annual affirmative civil rights compliance reviews of EPA funding recipients targeting critical environmental health and quality of life impacts in overburdened communities. EPA did not initiate a civil rights compliance review in FY 2021.

Long-Term Performance Goal: By September 30, 2026, complete 305 audits to ensure EPA financial assistance recipients are complying with nondiscrimination program procedural requirements.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM EJCR17) Number of audits completed to ensure EPA financial assistance recipients are complying with federal civil rights laws.	25	75	Audits	Above Target

Metric Details: This measure tracks post-award audits of Form 4700-4 forms to ensure EPA financial assistance recipients have in place foundational nondiscrimination program requirements as required by federal law and EPA's nondiscrimination regulation. EPA completed no such audits in FY 2021.

Long-Term Performance Goal: By September 30, 2026, complete 84 information sharing sessions and outreach and technical assistance events with overburdened and underserved communities and environmental justice advocacy groups on civil rights and environmental justice issues.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM EJCR18) Number of information sharing sessions and outreach and technical assistance events held with overburdened and underserved communities and	8	12	Sessions and Events	Above Target
environmental justice advocacy groups on civil rights and environmental justice issues.		12	and Events	Target

Metric Details: This measure tracks EPA's engagements with overburdened and underserved communities and environmental justice advocacy groups on civil rights and environmental justice issues impacting communities with environmental justice concerns. This outreach will help the Agency to better identify concerns and priorities for EPA's civil rights work. EPA completed five such sessions and events in FY 2021.

GOAL 3: ENFORCE ENVIRONMENTAL LAWS AND ENSURE COMPLIANCE—Improve compliance with the nation's environmental laws and hold violators accountable.

Objective 3.1: Hold Environmental Violators and Responsible Parties Accountable—Use vigorous and targeted civil and criminal enforcement to ensure accountability for violations and to clean up contamination.

Long-Term Performance Goal: By September 30, 2026, reduce to not more than 93 the number of open civil judicial cases more than 2.5 years old without a complaint filed.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM 436) Number of open civil judicial cases more than 2.5 years old without a complaint filed.	99	96	Cases	Below Target

Metric Details: This measure tracks the number of all open civil judicial cases that are more than 2.5 years old without a complaint filed, excluding Superfund, bankruptcy, collection action, and access order cases. Through this measure, the Agency aims to reduce the amount of time from referral of an enforcement case to the Department of Justice to its conclusion, and hence reduce the time by which violation(s) alleged in the case are corrected. Data are tracked in the Integrated Compliance Information System (ICIS). The average time from referral to complaint for a complaint filed between FY 2013 and FY 2017 was 2.5 years. The baseline for this measure is 129 cases that were more than 2.5 years old without a complaint filed as of June 30, 2018.

(PM 446) Quarterly percentage of Clean Water Act National Pollutant Discharge				Below
Elimination System (NPDES) permittees in significant noncompliance with their	10.1	10.1	Percent	Target
permit limits.				Target

Metric Details: This measure tracks the NPDES SNC/Category 1 noncompliance rate among individually permitted major and non-major (minor) NPDES permittees. NPDES SNC/Category 1 noncompliance identifies a specific level of violation, based on duration, severity, and type of violation, and is assessed quarterly. The numerator counts major and minor permittees that were in SNC/Category 1 noncompliance in the last quarter of the fiscal year. The denominator includes all active individually-permitted NPDES permittees (except permittees for which there is insufficient permit data/compliance tracking status in ICIS-NPDES for the data system to evaluate SNC status). The FY 2018 baseline of 20.3% represents an average based on four quarters of data.

(PM 434) Millions of pounds of pollutants and waste reduced, treated, or eliminated	325	325	Millions of	Above
through concluded enforcement actions.	323	323	Pounds	Target

Metric Details: This measure combines estimated pounds of air, water, hazardous and non-hazardous waste, and toxics/pesticides pollutants reduced, treated, or eliminated through concluded enforcement actions.

Objective 3.2: Detect Violations and Promote Compliance— Ensure high levels of compliance with federal environmental laws and regulations through effective compliance tools -- including inspections, other monitoring activities, and technical assistance supported by evidence and advanced technologies.

Long-Term Performance Goal: By September 30, 2026, send 75% of EPA inspection reports to facilities within 70 days of inspection.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM 444) Percentage of EPA inspection reports sent to the facility within 70 days of inspection.	75	75	Percent	Above Target

Metric Details: This measure tracks the percentage of inspection reports completed by EPA and sent to the facility within 70 calendar days of an inspection. Improving the timeliness of EPA inspection reports allows facilities to more quickly address compliance issues. The 75% goal recognizes that it may not always be possible or appropriate to provide an inspection report within 70 days because of the nature and complexity of the compliance and enforcement program.

Long-Term Performance Goal: By September 30, 2026, conduct 55% of annual EPA inspections at facilities that affect communities with potential environmental justice concerns.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM 450) Percentage of EPA inspections at facilities affecting communities with	45	50	Percent	Above
potential environmental justice concerns.				Target

Metric Details: This measure tracks the percentage of EPA on-site inspections conducted by credentialed EPA inspectors at facilities affecting communities with potential environmental justice concerns. The total includes facilities with one environmental indicator triggered at the 80th percentile at the national level (80th percentile/one index trigger) on EPA's environmental justice mapping and screening tool EJScreen, and other areas flagged through an enhanced review by inspectors that do not meet the EJScreen trigger. The baseline for this measure is 27% based on an average of FY 2017- FY 2019 results (pre-COVID levels).

Other Core Work

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.	10,000	10,000	Inspections/ Evaluations	Above Target

Metric Details: This measure tracks EPA inspections and off-site compliance monitoring activities to determine whether a facility or group of facilities is in compliance with applicable law. The FY 2022 and 2023 targets do not take into account any COVD-19-related challenges to performing on-site inspections.

GOAL 4: ENSURE CLEAN AND HEALTHY AIR FOR ALL COMMUNITIES—Protect human health and the environment from the harmful effects of air pollution.

Objective 4.1: Improve Air Quality and Reduce Localized Pollution and Health Impacts—Reduce air pollution on local, regional, and national scales to achieve healthy air quality for people and the environment.

Long-Term Performance Goal: By September 30, 2026, reduce ozone season emissions of nitrogen oxides (NO_x) from electric power generation sources by 21% from the 2019 baseline of 390,354 tons.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM NOX) Tons of ozone season NO _x emissions from electric power generation sources.	355,000	344,000	Tons	Below Target

Metric Details: This measure tracks the ozone season NO_x emissions from sources in four of EPA's nationwide and multi-state air pollution control programs: an annual NO_x trading program and two ozone season NO_x trading programs operated by EPA on behalf of 27 states in the

eastern U.S. under Title I of the Clean Air Act (CAA), as well as a national NO_x emissions reduction program for the power sector operated by EPA under Title IV of the CAA, the Acid Rain Program. NO_x are precursors for fine particulate matter ($PM_{2.5}$) and ground-level ozone (O_3). Researchers have associated $PM_{2.5}$ and O_3 exposure with adverse health effects in toxicological, clinical, and epidemiological studies. Lowering exposure to $PM_{2.5}$ and O_3 contributes to significant human health benefits. The ozone season corresponds to the warm summer months when ozone formation is highest ($May\ 1$ – September 30). Reductions in NO_x emissions during the ozone season help areas attain ambient ozone standards.

Long-Term Performance Goal: By September 30, 2026, improve measured air quality in counties not meeting the current National Ambient Air Quality Standards (NAAQS) from the 2016 baseline by 10%.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM NAAQS) Percentage of air quality improvement in counties not meeting current NAAQS.	7	8	Percent	Above Target

Metric Details: This measure shows progress in reducing pollutant concentrations in counties not meeting one or more current NAAQS relative to the 2016 calculated baseline. The Clean Air Act requires EPA to set the NAAQS for six "criteria" pollutants considered harmful to public health and the environment. These national standards form the foundation for air quality management. The measure is presented as the aggregate percentage change in design value concentrations – a statistic that describes the air quality status of a given location relative to the NAAQS – since the baseline year. The aggregate percentage change is weighted by the number of counties violating for each pollutant in the baseline year so more weight is given to pollutants with more violating counties. Four criteria pollutants (ozone, PM_{2.5}, PM₁₀, sulfur dioxide, and lead) are part of this measure. All counties met the NAAQS for carbon monoxide and nitrogen dioxide in 2016, so those two pollutants are not considered in this measure.

Long-Term Performance Goal: By September 30, 2026, strive to ensure all people with low socio-economic status (SES) live in areas where the air quality meets the current fine particle pollution (PM_{2.5}) National Ambient Air Quality Standards (NAAQS).

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM NAAQS2) Percentage of people with low SES living in areas where the air quality meets the PM _{2.5} NAAQS.	90	93	Percent	Above Target

Metric Details: This measure tracks the percentage of people with low SES, defined as two times the poverty level, living in counties with monitors measuring concentrations of PM_{2.5} that meet the 2012 annual and 2006 24-hour PM_{2.5} NAAQS. Long- and short-term exposures to fine particles can harm people's health, leading to heart attacks, asthma attacks, and premature death. In the baseline period of 2006-2008, 43% of the low SES population lived in counties that met both PM_{2.5} NAAQS. Changes since that time reflect the effectiveness of strategies designed to reduce fine particle pollution.

Long-Term Performance Goal: By September 30, 2026, ensure U.S. consumption of hydrochlorofluorocarbons (HCFCs) is less than 76.2 tons per year of ozone depletion potential.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM HCFC) Remaining U.S. consumption of hydrochlorofluorocarbons (HCFCs), chemicals that deplete the Earth's protective ozone layer, in ozone depletion potential (ODP)-weighted metric tons.	76.2	76.2	Metric Tons	Below Target

Metric Details: This measure tracks the United States' annual consumption of HCFCs in ODP-weighted tons. Consumption means the amount of HCFC produced, plus imports, minus exports, minus destruction, and minus amounts produced or imported for transformation. As a Party to the Montreal Protocol, the U.S. must incrementally decrease HCFC consumption and production, culminating in a complete HCFC phaseout in 2030. The current annual consumption cap of the U.S. for all HCFCs is 76.2 ODP-weighted metric tons, down from the 2015-2019 target of 1,520 ODP-weighted metric tons per year.

Objective 4.2: Reduce Exposure to Radiation and Improve Indoor Air—Limit unnecessary radiation exposure and achieve healthier indoor air quality, especially for vulnerable populations.

Long-Term Performance Goal: By September 30, 2026, prevent 2,250 lung cancer deaths annually through lower radon exposure as compared to the FY 2020 baseline of 1,684 prevented lung cancer deaths.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM LCD) Number of lung cancer deaths prevented through lower radon exposure.	1,881	1,962	Deaths Prevented	Above Target

Metric Details: This measure tracks lung cancer deaths prevented annually by reducing radon exposure, calculated using estimates of the number of homes in the U.S. with radon levels above the EPA action level of 4pCi/L (picocuries per liter) that have been mitigated and the number of new homes that have been built with radon resistant features. Lung cancer is the leading cause of cancer death among both men and women in the United States. Exposure to radon indoors is the second-leading cause of lung cancer in the United States. EPA estimates there are 12,000 avoidable lung cancer deaths annually attributable to indoor radon exposure and more than seven million homes in the U.S. are at or above the EPA radon action level.

Other Core Work

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM RAD2) Percentage of radiation emergency response program personnel and assets that meet functional readiness requirements necessary to support federal radiological	90	92	Percent	Above Target
emergency response and recovery operation.				rarget

Metric Details: This measure tracks percent readiness of EPA headquarters, laboratory and field support elements including assets and equipment, procedures and programs, licenses and accreditations, personnel, qualifications, exercise participation, and training. Percent readiness is calculated by the total score earned during an annual assessment of elements divided by the total points assigned to those elements.

(PM IA) Number of additional programs, annually, equipped to support the infrastructure, delivery and sustainability of comprehensive asthma care.

1,800
2,100
Programs
Above Target

Metric Details: This measure tracks EPA delivery of technical assistance, tools, and grant support to equip community-based programs and the organizations that support them to deliver evidence-based, comprehensive asthma care. Twenty-four million Americans, including six million children, have asthma. Low income and minority children suffer disproportionately. In-home environmental interventions reduce health care utilization and improve quality of life for people with asthma.

(PM CS) Millions of demonstrably improved (field or lab tested) cookstoves sold.

50 Millions of Above Cookstoves Target

Metric Details: This measure tracks millions of demonstrably improved cookstoves sold worldwide. More than three billion low-income people around the world, including 600,000 low-income Americans, cook their food and/or heat their homes with open fires or rudimentary stoves. The resulting exposure to extraordinarily high levels of indoor air pollution causes four million premature deaths worldwide, primarily among women and girls. Emissions from household energy/cookstoves are the largest controllable source of the short-lived climate pollutant black carbon (>50%) and cookstove emissions also include methane and carbon dioxide (CO₂). EPA leads the development of cookstove standards through the International Organization for Standardization (ISO) and works with partners to rapidly increase the sustained use of demonstrably clean and efficient cookstoves and fuels, with approximately 48 million improved stoves sold in 2019.

GOAL 5: ENSURE CLEAN AND SAFE WATER FOR ALL COMMUNITIES—Provide clean and safe water for all communities and protect our nation's waterbodies from degradation.

Objective 5.1: Ensure Safe Drinking Water and Reliable Water Infrastructure—Protect public health from the risk of exposure to regulated and emerging contaminants in drinking and source waters by improving the reliability, accessibility, and resilience of the nation's water infrastructure to reduce the impacts of climate change, structural deterioration, and cyber threats.

Long-Term Performance Goal: By September 30, 2026, reduce the number of community water systems still in noncompliance with health-based standards since March 31, 2021 from 752 to 500.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM DW-02) Number of community water systems still in noncompliance with health-based standards since March 31, 2021.	640	590	CWSs	Below Target

Metric Details: This measure tracks the number of Community Water Systems (CWSs) still in noncompliance with the health-based National Primary Drinking Water Regulations (Maximum Contaminant Level or treatment technique) during any part of the year, relative to the group in noncompliance as of September 30, 2017. A CWS is a public water system that supplies water to the same population year-round. There are

approximately 50,000 CWSs. The total includes CWSs in Indian country. As of September 30, 2021, 654 of the original 3,508 systems were still in non-compliance with health-based standards. Data are derived from the Safe Drinking Water Information System Federal Data Warehouse (SDWIS-FED), which contains information about violations by public water systems as reported to EPA by the primacy agencies (tribes and states with EPA-delegated enforcement responsibility). Technical assistance provided will focus on non-compliant water systems in underserved communities.

Long-Term Performance Goal: By September 30, 2026, reduce the number of community water systems in Indian country still in noncompliance with health-based standards since March 31, 2021 from 110 to 70.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM DWT-02) Number of community water systems in Indian Country still in noncompliance with health-based standards since March 31, 2021.	100	90	CWSs	Below Target

Metric Details: This measure tracks the number of Tribal Community Water Systems still in noncompliance with the health-based National Primary Drinking Water Regulations (Maximum Contaminant Level or treatment technique) during any part of the year, relative to the group in non-compliance on March 31, 2021. There are approximately 730 Tribal CWSs. Data are derived from SDWIS-FED, which contains information about violations by public water systems as reported to EPA by the primacy agencies (EPA regional offices and tribes with EPA-delegated enforcement responsibility).

Long-Term Performance Goal: By September 30, 2026, leverage an additional \$45 billion in non-federal dollars through EPA's water infrastructure finance programs (CWSRF, DWSRF and WIFIA).

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM INFRA-01) Billions of non-federal dollars leveraged by EPA's water	9	0	Billions of	Above
infrastructure finance programs (CWSRF, DWSRF and WIFIA).		9	Dollars	Target

Metric Details: This measure tracks funds leveraged by the three primary water infrastructure programs: The Drinking Water State Revolving Fund (DWSRF), the Clean Water State Revolving Fund (CWSRF), and the Water Infrastructure Finance and Innovation Act (WIFIA) Program. These programs represent the largest federal source of funds to address this critical component of our nation's drinking water and clean water infrastructure. Non-federal funds include loans made from recycled loan payments, bond proceeds, state match, interest earnings, and co-funding from non-SRF sources. EPA will increase the amount of non-federal funds leveraged by providing communities with tools, training, and resources to help plan for infrastructure improvements and identify funding opportunities. The Agency will ensure a focus on climate resiliency and equity by revising loan guidelines and program guidance, and providing technical assistance. SRF data are tracked in the CWSRF Benefits Reporting System and DWSRF Project Reporting System.

Long-Term Performance Goal: By September 30, 2026, in coordination with other federal agencies provide access to basic sanitation for an additional 36,500 American Indian and Alaska Native homes.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM WWT-02) Number of American Indian and Alaska Native homes provided	6,098	6,098	Homes	Above
access to basic sanitation, in coordination with other agencies.	0,098	0,000	11011105	Target

Metric Details: This measure tracks American Indian and Alaska Native homes provided with wastewater treatment infrastructure through Congressionally appropriated funds, in coordination with other agencies. To show progress towards this measure, EPA will use the number of homes that received improved wastewater sanitation services as reported through the Indian Health Service (IHS) Sanitation Tracking and Reporting System (STARS). IHS housing information is collected once annually (typically in November) to capture the progress of the previous construction season. There were 413,454 American Indian and Alaska Native homes in the IHS database as of FY 2019. (In FY 2021, 4,007 American Indian and Alaska Native homes were provided access to basic sanitation, in coordination with other agencies. For more information visit: https://www.epa.gov/small-and-rural-wastewater-systems/clean-water-indian-set-aside-program.) Targets are based on past years' performance, assumption of relatively constant future funding levels, and continued coordination with other federal agencies.

Long-Term Performance Goal: By September 30, 2026, provide 2,203 Tribal, small, rural, or underserved communities with technical, managerial, or financial assistance to improve operations of their drinking water or wastewater systems.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM INFRA-06) Number of tribal, small, rural, or underserved communities provided with technical, managerial, or financial assistance to improve system operations.	339	448	Commun- ities	Above Target

Metric Details: This measure tracks the number of tribal, small, or rural communities, or communities with environmental justice concerns, provided with EPA technical, managerial, or financial assistance through on-site visits or training to effectively operate drinking water systems or wastewater treatment systems. Data are collected through grantee reports.

(PM DW-07) Number of drinking water and wastewater systems, tribal and state			Cyatama and	Abovo
officials, and water sector partners provided with security, emergency preparedness,	2,000	2,000	Systems and Partners	Above Target
and climate resilience training and technical assistance.			raitheis	Target

Metric Details: This measure tracks the number of drinking water, wastewater, and stormwater (water sector) utilities, tribal and state officials, and water sector partners provided by EPA with practical tools, training, and technical assistance needed to increase resilience to extreme weather events (e.g., drought, flooding, wildfires, hurricanes), malevolent acts (e.g., cyberattacks), and climate change. EPA assistance promotes a clear understanding of climate change and potential long-term adaptation options for decision-making related to water utility infrastructure operations and financing. Training and technical assistance will target participation of underserved communities.

Objective 5.2: Protect and Restore Waterbodies and Watersheds—Address sources of water pollution and ensure water quality standards are protective of the health and needs of all people and ecosystems.

Long-Term Performance Goal: By September 30, 2026, increase by 41,000 square miles the area of watersheds with surface water meeting standards that previously did not meet standards.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM SWP-01) Annual increase in square miles of watersheds with surface water	8,000	5,000	Square	Above
meeting standards that previously did not meet standards.	8,000	3,000	Miles	Target

Metric Details: This measure tracks improvements in impaired waters as reported on state Clean Water Act (CWA) Section 303(d)/305(b) Integrated Reports. States report on their water quality assessments every two years. Water quality standards attainment means that: 1) the impairments have been effectively removed due to actions including water quality restoration efforts, more complete monitoring to better understand waterbody conditions, or appropriate changes in water quality standards; and 2) the waterbody now either fully supports the use or meets the water quality criterion for that particular pollutant or stressor for which it had been impaired. EPA will ensure watersheds will continue to meet the standards by assessing for equity and climate impacts. Data are tracked in EPA's Assessment, Total Maximum Daily Load (TMDL) Tracking and Implementation System (ATTAINS). As states continue to perform assessments, they continue to identify additional impaired waters. As of July 7, 2021, the draft baseline was 425,198 square miles of watershed area with surface water that are meeting standards and 652,609 square miles of watersheds with surface water not meeting standards. The baseline will be revised in the second half of FY 2022 due to a change in the catchment base layer used to calculate this measure. This measure will be transitioned from using the old National Hydrology Dataset Plus (NHDPlus) V2 catchments to the new NHDPlus HR-VF-Gen catchment layer. Targets are based on receipt of Integrated Reports due to EPA every even year, with some reporting delayed to other years.

(PM SWP-02) Annual increase in square miles of watersheds with previously impaired surface waters due to nutrients that now meet standards for nutrients.	2,100	1,400	Square Miles	Above Target
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Metric Details: This measure tracks improvements in impaired waters due to nutrients as reported on state Clean Water Act (CWA) Section 303(d)/305(b) Integrated Reports. As of July 7, 2021, the draft universe is 209,863 square miles of watershed area with surface water that are not meeting standards due to nutrients. The universe will be revised in the second half of FY 2022.

Other Core Work

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM NPDES-03) Number of existing EPA-issued NPDES individual permits in backlog.	250	210	Permits	Below Target

Metric Details: This measure tracks existing EPA-issued National Pollutant Discharge Elimination System (NPDES) individual permits that are administratively continued for 180 days or more. EPA modified the title of this measure to specify that only individual permits are being tracked and reported, which has been the case since the measure began in FY 2018. Between FY 2018 and FY 2021, EPA considered permits to be backlogged as soon as they passed their expiration date and were administratively continued. For FY 2022, EPA will define the backlog as any permit that is administratively continued for 180 days or more. This will allow the prioritization of complex permits and resource efficiency. Permits are removed from the backlog as soon as the Agency issues, denies, or terminates a permit. The overall backlog was reduced from 547 as of March 2018 to 284 as of September 30, 2021. Data are tracked in EPA's Integrated Compliance Information System (ICIS)-NPDES Database.

(PM TMDL-02) Percentage of priority TMDLs, alternative restoration plans, and protection approaches in place.

100

35

Percent

Above Target

Metric Details: For FY 2022, this measure tracks state priority waters with a Total Maximum Daily Load (TMDL), alternative restoration, or protection plan in place. EPA, tribes, and states cooperatively developed a Long-Term Vision for Assessment, Restoration and Protection under the Clean Water Act (CWA) Section 303(d) Program (https://www.epa.gov/sites/default/files/2015-

<u>07/documents/vision 303d program dec 2013.pdf</u>) which encourages focused attention on priority waters and acknowledges that states have flexibility in using available tools – TMDLs, Alternative Restoration Plans, and protection approaches – to restore and protect water quality. The calculation method provides 0.5 credit for plans under development and full credit when EPA approves a plan. The goal is to have 100% of priority waters with plans approved or accepted by FY 2022. EPA is in the process of working with states to develop a new universe for FY 2023. States will be able to meet targets with a mix of plans in development and plans in place depending on their initial commitments. EPA expects to have the target finalized in FY 2022. Data are tracked in ATTAINS.

GOAL 6: SAFEGUARD AND REVITALIZE COMMUNITIES—Restore land to safe and productive uses to improve communities and protect public health.

Objective 6.1: Clean Up and Restore Land for Productive Uses and Healthy Communities—Clean up and restore contaminated sites to protect human health and the environment and build vibrant communities, especially in underserved and overburdened areas.

Long-Term Performance Goal: By September 30, 2026, bring human exposures under control at additional 60 Superfund sites.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM 151) Number of Superfund sites with human exposures brought under control.	12	12	Sites	Above Target

Metric Details: This measure documents progress achieved in controlling unacceptable human exposures to contamination at both private and federal facility Superfund sites and denotes a site-wide accomplishment. The human exposure determination at a site can change over time as conditions across portions (operable units) of a site change. EPA regional offices enter human exposure determinations and supporting data into the Superfund Enterprise Management System (SEMS). Results reflect a net accomplishment as sites can shift between human exposure under control to human exposure not under control or human exposure insufficient data. The status change often occurs when a previously unknown exposure

pathway (e.g., vapor intrusion) or contaminant is discovered, and a reasonable expectation exists that people could be exposed or that there is insufficient data to make such a determination until further investigation takes place. As of FY 2021, there were 1,550 Superfund sites with human exposures under control out of a total of 1,820 sites where human exposure is tracked.

(PM S10) Number of Superfund sites made ready for anticipated use site-wide.	25	1.5	Sitos	Above
(PW S10) Number of Superfund sites made ready for anticipated use site-wide.	23	13	Sites	Target

Metric Details: This measure tracks EPA's progress in cleaning up and preparing Superfund sites (both private and federal facility) for reuse sitewide, while ensuring human health and environmental protection. It measures the number of construction complete final and deleted Superfund National Priorities List (NPL) or non-NPL Superfund Alternative Approach (SAA) sites for which all: 1) remedy decision document (e.g., record of decision (ROD)) cleanup goals have been achieved for media that may affect a site's current and reasonably anticipated future land use, so that there are no unacceptable risks; and 2) institutional or other controls required in remedy decision document(s) have been put in place. EPA documents the sitewide ready for anticipated use (SWRAU) determination directly in SEMS once a site meets all required criteria and the appropriate EPA regional personnel have approved the determination. Since 2018, SWRAU accomplishments and the inventory of eligible sites have decreased. The number of SWRAU eligible sites was estimated at 81 sites following a 2021 SWRAU information collection effort with EPA regional offices. Of the 81 sites, 26 achieved SWRAU in 2021. The remaining eligible sites face increasingly difficult challenges to achieve SWRAU, primarily related to institutional controls implementation. Cleaning up contaminated land reduces the environmental and health effects of exposure to contamination in communities, especially overburdened communities, and contributes toward the Administration's Justice40 goal.

1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(PM 170) Number of remedial action projects completed at Superfund sites.	80	75	Projects	Above Target
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Metric Details: This measure tracks the number of remedial action projects completed at Superfund sites. Cleaning up contaminated land reduces the environmental and health effects of exposure to contamination in communities, especially overburdened communities, and contributes toward the Administration's Justice40 goal. By tracking the completion of a discrete scope of Superfund cleanup activities (for both private and federal facility sites), this measure documents incremental progress in reducing risk to human health and the environment. Multiple remedial action projects may be necessary to achieve sitewide construction completion. EPA captures this data in SEMS.

(PM 137) Number of Superfund removals completed.	183	183	Removals	Above
(1 W 137) Number of Superfund Temovals completed.	103	103	ICIIIOvais	Target

Metric Details: This measure tracks Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) removal-related hazardous waste cleanups, known as Superfund removal actions, including those that are Superfund-lead and Potentially Responsible Party (PRP)-lead. There is no pre-established universe of removal sites, as removal actions take place after a release has occurred. Data are tracked in SEMS.

Long-Term Performance Goal: By September 30, 2026, complete 225 Superfund cleanup projects that address lead as a contaminant.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM 155) Number of Superfund cleanup projects completed that address lead as a contaminant.	45	45	Projects	Above Target

Metric Details: This measure documents progress to reduce exposure to lead and associated health impacts by reporting the completion of cleanup actions that include lead as a contaminant. Response action projects include removal and remedial actions that address lead as a contaminant. The universe of applicable remedial actions consists of those at all final and deleted NPL sites and sites with SAA agreements. There is no preestablished universe of removal sites, as removal actions take place after a release has occurred.

Long-Term Performance Goal: By September 30, 2026, clean up an additional 650 brownfields properties.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM B32) Number of brownfields properties cleaned up.	130	130	Properties	Above Target

Metric Details: This measure tracks the number of properties that have been cleaned up to a regulatory risk-based standard using EPA brownfields funding, as reported by cooperative agreement recipients into the Assessment, Cleanup and Redevelopment Exchange System (ACRES) database. Cleaning up contaminated land reduces the environmental and health effects of exposure to contamination in communities, especially overburdened communities, and contributes toward the Administration's Justice40 goal.

(PM B30) Number of brownfields sites made ready for anticipated use.	600	600	Sites	Above
(1 141 150) Ivalified of blownificial sites made ready for anticipated use.	000	000	Sites	Target

Metric Details: This measure tracks the number of properties/sites benefiting from EPA brownfields funding that have been assessed and determined not to require cleanup, or where cleanup has been completed and institutional controls are in place if required, as reported by cooperative agreement recipients. This activity results in additional sites available for productive reuse. Prior year targets and results reflect a data cleanup project to collect data on projects completed in previous years that had not been reported previously. This project is now complete.

(PM B29) Number of brownfields properties assessed.	1,400	1,400	Properties	Above Target
				Laivel

Metric Details: This measure tracks the number of properties that have been environmentally assessed for the first time using EPA brownfields funding, as reported by cooperative agreement recipients.

Long-Term Performance Goal: By September 30, 2026, make an additional 425 RCRA corrective action cleanups Ready for Anticipated Use.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM RSRAU) Number of RCRA corrective action facilities made ready for anticipated use.	114	100	Facilities	Above Target

Metric Details: This measure tracks the number of Resource Conservation and Recovery Act (RCRA) corrective action facilities made ready for anticipated use (RAU). To be determined RAU, facilities must meet the following criteria: human exposure under control; final cleanup goals achieved for media that would affect the anticipated use; and if needed, controls in place to ensure long-term protectiveness. Information is entered into the RCRAInfo database by authorized states and/or EPA regional offices overseeing cleanups. There were 3,924 facilities subject to RCRA corrective action in FY 2021, of which 2,135 had not yet been determined RAU.

(PM CA5RC) Number of RCRA corrective action facilities with final remedies constructed.	55	55	Facilities	Above Target
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Metric Details: This measure tracks the number of RCRA corrective action facilities with final remedies constructed. This measure tracks a midterm step in the progression toward completing facility cleanup.

Long-Term Performance Goal: By September 30, 2026, conduct an additional 35,000 cleanups at Leaking Underground Storage Tank facilities.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM 112) Number of LUST cleanups completed that meet risk-based standards for human exposure and groundwater migration.	7,439	7,125	Cleanups	Above Target

Metric Details: This measure tracks the number of completed cleanups of petroleum-contaminated confirmed releases, also known as Leaking Underground Storage Tank (LUST) cleanups. The totals include cleanups reported by states as well as EPA cleanups in Indian country. Cleanups in Indian country represent approximately 0.2% of total cleanups completed. Data are tracked in the LUST4 database. Targets are based on 12% of the prior year's estimated backlog of remaining cleanups. The backlog will continue to reduce over time so the targets will correspondingly reduce. Forecasted backlog reduction based on five years of data trends through FY 2020. As of FY 2021, there were 564,767 cumulative confirmed releases, out of which there were 502,786 LUST cleanups completed.

Other Core Work

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM CO1) Percentage of technical assistance projects in support of environmentally sustainable and community-driven revitalization that support or expand upon previous or ongoing federal investments.		TBD	Percent	Above Target

Metric details: This measure tracks the number of community revitalization technical assistance engagements with communities that have had programmatic or financial investments from federal programs within the past five years. These investments include those of EPA or other federal agencies. This subsequent technical assistance can help maximize the previous investment by supporting its implementation or expanding upon it by helping the community make related improvements. These efforts can help coordinate and align federal engagements and create connections that will spur ongoing utilization of smart growth tools and best practices toward environmental protection and economic development. The baseline and FY 2023 target will be established in FY 2022.

Objective 6.2: Reduce Waste and Prevent Environmental Contamination—Prevent environmental pollution by preventing releases, reducing waste, increasing materials recovery and recycling, and ensuring sustainable materials management practices.

Long-Term Performance Goal: By September 30, 2026, increase the percentage of updated permits at RCRA facilities to 80% from the FY 2021 baseline of 72.7%.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM HW5) Number of updated permits issued at hazardous waste facilities.	90	100	Permits	Above Target

Metric Details: This measure tracks the number of RCRA hazardous waste permit updates or clean-closures in the universe of permitted facilities using EPA's RCRAInfo system. This does not include all permit maintenance since permit modifications cannot be projected and are not included. The related Long-Term Performance Goal refers to the overall percentage of RCRA facilities with permits that are not past expiration and have been updated though a permit renewal (or are not past the permit term/expiration). Maintaining up-to-date permits ensures that permitted facilities have consistent and protective standards to prevent release. This will ensure permits reflect updated standards, remain protective under changing conditions due to climate change, and provide meaningful community involvement in the permitting process over time. Proper standards for waste management can protect human health, prevent land contamination/degradation and other releases, and avoid future cleanups and associated costs. EPA directly implements the RCRA Program in Iowa and Alaska and provides leadership, work-sharing, and support to the remaining states and territories authorized to implement the permitting program. There were 1,313 permitted hazardous waste facilities as of FY 2021.

(PM UST01) Number of confirmed releases at UST facilities.	5,150	5,075	Releases	Below
(1 14 05101) Number of commined releases at 051 facilities.	3,130	3,073	Releases	Target

Metric Details: This measure tracks the number of confirmed releases discovered at Underground Storage Tank (UST) facilities during the year. The number of confirmed releases is targeted to decline by 75 each year. The LUST Prevention Program provides funding to tribes and states to prevent releases from the 540,423 federally regulated USTs by ensuring compliance with federal and state laws through inspections and other activities. Preventing UST releases is more efficient and less costly than cleaning up releases after they occur.

Objective 6.3: Prepare for and Respond to Environmental Emergencies—Prevent, prepare, and respond to environmental emergencies and support other agencies on nationally significant incidents, working with Tribes, states, and local planning and response organizations.

Long-Term Performance Goal: By September 30, 2026, ensure that 40% of annual emergency response and removal exercises that EPA conducts or participates in incorporate environmental justice.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM ER02) Percentage of emergency response and removal exercises that EPA conducts or participates in that incorporate environmental justice.	14	21	Percent	Above Target

Metric Details: This measure tracks the number of emergency response and removal exercises that EPA conducts or participates in that incorporate solutions to or address environmental justice challenges. The following mechanisms will be used to incorporate solutions to or address environmental justice challenges in exercises: involving facilities in locations that impact communities with environmental justice concerns; including an entity with environmental justice concerns as a participating organization; including environmental justice concerns or communities in the exercise scenario; or including scenario injects that incorporate environmental justice concerns or entities. Incorporating solutions to or addressing environmental justice challenges includes addressing language, mobility, or financial barriers or engaging community-based leadership.

(PM ER01) Number of emergency response and removal exercises that EPA conducts or participates in.	120	120	Exercises	Above Target	
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Metric Details: This measure tracks the number of emergency response and removal exercises that EPA conducts or participates in, including: (1) CERCLA exercises which are exercises specific to CERCLA requirements or contaminants. These can include participation in exercises with Local Emergency Planning Committees (LEPCs) or Risk Management Plan (RMP) facilities with emphasis on CERCLA hazardous substance releases. (2) Oil spill preparedness exercises including tabletop, functional and full scale, and Government-Initiated Unannounced Exercises (GIUEs). These include internal exercises to ensure readiness and external training and readiness exercises. (3) Homeland Security exercises at which EPA staff participated. And (4) Federal Emergency Management Agency (FEMA) exercises in which EPA staff participated. The baseline is 120 exercises in FY 2021. Annual targets for this measure maintain this level of effort.

GOAL 7: ENSURE SAFETY OF CHEMICALS FOR PEOPLE AND THE ENVIRONMENT—Increase the safety of chemicals and prevent pollution at the source.

Objective 7.1: Ensure Chemical and Pesticide Safety—Protect the health of families, communities, and ecosystems from the risks posed by chemicals and pesticides.

Long-Term Performance Goal: By September 30, 2026, complete at least eight High Priority Substance (HPS) TSCA risk evaluations annually within statutory timelines compared to the FY 2020 baseline of one.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM TSCA4) Number of HPS TSCA risk evaluations completed within statutory timelines.	0	8	Evaluations	Above Target

Metric Details: This measure tracks HPS chemical risk evaluations completed annually for existing chemicals within the statutory deadline. Risk evaluations are needed to protect human health and the environment from unnecessary risks. The Toxic Substances Control Act (TSCA) requires risk evaluations for HPS to be completed within 3.5 years of the date the chemical is prioritized. TSCA requires that upon completion of a HPS risk evaluation, EPA must designate at least one additional HPS to take its place, thus ensuring that at least 20 EPA-initiated HPS risk evaluations are underway at all times. A baseline of one HPS risk evaluation was completed within statutory timelines to protect human health and the environment from unnecessary risk in FY 2020. For more information, see: https://www.epa.gov/assessing-and-managing-chemicals-undertsca/risk-evaluations-existing-chemicals-under-tsca.

Long-Term Performance Goal: By September 30, 2026, initiate all TSCA risk management actions within 45 days of the completion of a final existing chemical risk evaluation.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM TSCA5) Percentage of existing chemical TSCA risk management actions initiated within 45 days of the completion of a final existing chemical risk evaluation.	100	100	Actions	Above Target

Metric Details: This measure tracks the percentage of existing chemical risk management rulemakings initiations, defined as the point at which EPA convenes the Agency workgroup following the tiering process for the rulemaking, within 45 days of publishing the final risk evaluation. TSCA Section 6(a) requires EPA to issue a proposed risk management rule for a chemical substance no later than one year after the date on which the final risk evaluation is published, and to publish a final rule no later than two years after the publication date of the final risk evaluation. While EPA's Action Development Process includes timelines that do not conform to TSCA's rulemaking expectations, prompt initiation of risk management actions after the completion of risk evaluations is necessary for protecting human health and the environment from chemical risks. A baseline of 100% of existing chemical TSCA risk management actions were initiated within 45 days of the completion of a final existing chemical risk evaluation in FY 2020. For more information, see: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-management-existing-chemicals-under-tsca/process.

Long-Term Performance Goal: By September 30, 2026, review 90% of risk mitigation requirements for past TSCA new chemical substances decisions compared to the FY 2021 baseline of none.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM TSCA6a) Percentage of past TSCA new chemical substances decisions with risk mitigation requirements reviewed.	5	25	Percent	Above Target

Metric Details: This measure tracks the percentage of risk mitigation requirements in EPA TSCA Section 5 orders or Significant New Use Rules (SNURs) that EPA reviews for adherence/non-adherence with these requirements. EPA puts these measures in place to protect human health and the environment by identifying conditions to be placed on the use of a new chemical before it is entered into commerce. EPA will review compliance with established restrictions in TSCA Section 5 orders or SNURs by cross-walking action requirements with information reported to the Chemical Data Reporting (CDR) rule. Instances of non-compliance will be relayed to EPA's Office of Enforcement and Compliance Assurance for additional actions. This could include additional virtual records auditing, on-site audits, issuance of compliance advisories or guidances, requests for information/subpoenas, and modifications/updates to TSCA Section 5 consent orders, SNURs, or other requirements, as appropriate. No TSCA new chemical substances with risk mitigation requirements were reviewed to confirm manufacturers were adhering to past TSCA Section 5 consent orders and SNUR requirements in FY 2021. For more information, see: https://www.epa.gov/reviewing-new-chemicals-undertoxic-substances-control-act-tsca/basic-information-review-new.

(PM TSCA6b) Percentage of TSCA new chemical substances with risk mitigation requirements reviewed for adherence/non-adherence with TSCA Section 5 risk	N/A	25	Percent	Above Target
mitigation requirements that are determined to adhere to those requirements.				ranger

Metric Details: This measure tracks the percentage of chemicals reviewed for adherence/non-adherence with TSCA Section 5 risk mitigation requirements that are determined to be in adherence with these requirements.

Long-Term Performance Goal: By September 30, 2026, recertify before the expiration date 36% of lead-based paint Renovation, Repair, and Painting (RRP) firms whose certifications are scheduled to expire compared to the FY 2021 baseline of 32%.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM RRP30) Percentage of lead-based paint RRP firms whose certifications are scheduled to expire that are recertified before the expiration date.	32	33	Percent	Above Target

Metric Details: This measure tracks the percentage of expiring lead-based paint firm certifications renewed before the expiration date. Number of recertifications can vary widely from year to year due to external variabilities. This industry has a high level of turnover (companies closing and opening). Higher numbers for this measure reflect interest in the industry for continuing to provide these critical services. Federal law requires all RRP firms working in housing, or facilities where children are routinely present, built before 1978, to be certified. Firms must apply to EPA for certification to perform renovations or dust sampling. To apply, a firm must submit a completed application and fee to EPA online. EPA RRP firm certifications are good for five years. Firms must apply for recertification at least 90 days before the firm's current certification expires. Data are tracked in the Federal Lead-based Paint Program database. Data include recertifications from jurisdictions where EPA administers the RRP Program. These data do not include recertifications from tribes or states with delegated programs. The baseline of 32% is based on the average recertification rate during the final six months of FY 2021 due to unusual circumstances in the first half of the fiscal year.

Long-Term Performance Goal: By September 30, 2026, complete 78 pesticide registration review cases with statutory due dates that fall after October 1, 2022.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM FIFRA3a) Number of pesticide registration review cases completed with statutory due dates that fall after October 1, 2022.	15	20	Cases	Above Target

Metric Details: This measure tracks the annual number of pesticide registration review case completions with statutory due dates that fall after October 1, 2022. EPA is reviewing each registered pesticide every 15 years to determine whether it still meets the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) standard for registration and to ensure that pesticides already in the marketplace do not pose unreasonable adverse effects on people or the environment based on current science standards. A total of 78 registered pesticides have 15-year cycle due dates that fall after October 1, 2022. The baseline is one pesticide registration review case completed in FY 2020 with a statutory due date that falls after October 1, 2022.

(PM FIFRA3b) Number of pesticide registration review dockets opened for registration review cases with statutory completion dates that fall after October 1, 2022.	25	27	Dockets	Above Target
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Metric Details: This measure tracks the annual number of docket openings for pesticide registration review with statutory due dates that fall after October 1, 2022. Docket openings are the first stage of the registration review process and offer the first opportunity for the public to provide comment. The baseline is 11 docket openings in FY 2020.

(PM FIFRA3c) Number of draft risk assessments completed for pesticide registration	Q	21	Draft As-	Above
review cases with statutory completion dates that fall after October 1, 2022.	9	21	sessments	Target

Metric Details: This measure tracks the annual number of draft risk assessments completed for pesticide registration review cases with statutory due dates that fall after October 1, 2022. The draft risk assessment presents EPA's preliminary risk findings to the public and provides opportunity for public comment. Maintaining targets for this measure helps ensure that registration review case completion targets are achieved. The baseline is five draft risk assessments completed in FY 2020.

Long-Term Performance Goal: By September 30, 2026, consider the effects determinations or protections of federally threatened and endangered species for new active ingredients in 90% of the risk assessments supporting pesticide registration decisions compared to the FY 2020 baseline of 50%.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM ESA1) Percentage of risk assessments supporting pesticide registration decisions for new active ingredients that consider the effects determinations or protections for federally threatened and endangered species.	40	50	Percent	Above Target

Metric Details: This measure tracks the percentage of risk assessments for pesticide registration decisions for new active ingredients that incorporate Endangered Species Act (ESA) requirements to ensure federal actions do not jeopardize the continued existence of federally threatened or endangered species or damage their critical habitat. Historically, EPA has not incorporated ESA determinations into its regulatory decisions other than determinations of "no effects" (mostly for biopesticides), due to the lengthy process of ESA consultation with the Services (U.S. Fish and Wildlife Service and National Marine Fisheries Service). EPA will more routinely incorporate ESA effects determinations into its regulatory decisions, and ensure protection for listed species earlier in the consultation process through label mitigation. The FY 2020 baseline year included a relatively higher percentage of determinations of "no effects" for biopesticide new active ingredient registration decisions in relation to overall new active ingredient registration decisions. Biopesticide determinations of "no effects" are estimated to apply to 70-80 percent of new active ingredient registration decisions in any given fiscal year; the remainder includes conventional pesticides, antimicrobial pesticides, and biopesticides for which determinations of "no effects" cannot be made.

Long-Term Performance Goal: By September 30, 2026, consider the effects determinations or protections of federally threatened and endangered species in 50% of the risk assessments supporting pesticide registration review decisions compared to the FY 2020 baseline of 27%.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM ESA2) Percentage of risk assessments supporting pesticide registration review decisions that include effects determinations or protections of federally threatened and	20	30	Percent	Above
endangered species.				Target

Metric Details: This measure tracks the percentage of risk assessments for pesticide registration review decisions that incorporate ESA requirements, including decisions subject either to the statutory deadline of October 2022 for the first cycle of registration review or to a 15-year schedule of review under the second cycle. Implementation of this process for pesticide registration review decisions will follow implementation for new active ingredient pesticide registration decisions. Some cases in the first cycle of registration review are currently involved in litigation due

to EPA's failure to incorporate ESA considerations. EPA calculated the FY 2020 baseline of 27% based on the portion of all actions in registration review during FY 2020 for conventional pesticides, biopesticides, and antimicrobial pesticides that included either a determination of "no effects" or measures that are intended to reduce exposure to listed species. The risk assessments that considered endangered species in FY 2020 were cases where EPA made a determination that there is "no effects" on listed species based either on a lack of potential exposure or a lack of toxicological harm. EPA calculated the FY 2020 baseline assuming 107 completed risk assessments of which 29 included determinations of "no effects" on listed species. The FY 2022 target reflects determinations of "no effects" and that implementation will be in its very early stages.

Long-Term Performance Goal: By September 30, 2026, support Agricultural Worker Protection Standard (WPS) pesticide safety training for 20,000 farmworkers annually compared to the FY 2018-2020 annual average baseline of 11,000.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM WPS1a) Number of farmworkers receiving EPA-supported WPS pesticide safety training.	20,000	20,000	Farm- workers	Above Target

Metric Details: This measure tracks the number of farmworkers trained under EPA cooperative agreements in accordance with the Agricultural WPS rule. The purpose of the WPS is to reduce pesticide poisonings and injuries among agricultural workers and pesticide handlers. The WPS offers occupational protections to over 2 million agricultural workers and pesticide handlers who work at over 600,000 agricultural establishments. WPS pesticide safety training is an annual requirement. An average of 11,000 individuals had the EPA-supported WPS training from FY 2018-2020, which reflects a sharp drop-off in training in FY 2020 due to the COVID-19 pandemic.

(PM WPS1b) Percentage of content knowledge learned by farmworker/trainees upon completion of EPA-supported WPS pesticide training.	95	Percent	Above Target

Metric Details: This measure tracks the average level of knowledge of the pesticide safety content at the conclusion of EPA-supported WPS pesticide training, based on evaluations administered to trainees. The baseline of 95 percent is based on post-training assessments conducted annually from FY 2018-2020.

Objective 7.2: Promote Pollution Prevention—Encourage the adoption of pollution prevention and other stewardship practices that conserve natural resources, mitigate climate change, and promote environmental sustainability.

Long-Term Performance Goal: By September 30, 2026, reduce a total of 6 million metric tons of carbon dioxide equivalent (MMTCO₂e) released attributed to EPA pollution prevention grants.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM P2mtc) Reduction in million metric tons of carbon dioxide equivalent (MMTCO ₂ e) released per year attributed to EPA pollution prevention grants.	1.2	1.2	MMTCO ₂ e	Above Target

Metric Details: This measure tracks MMTCO₂e reductions from all Pollution Prevention Grant Program activities. MMTCO₂e is calculated by using an online tool to convert standard metrics for electricity, green energy, fuel use, chemical substitutions, water management, and materials management into MMTCO₂e (https://www.epa.gov/p2/pollution-prevention-tools-and-calculators). Annual results are the total reported by

grantees in a single year plus the contributions from the previous three years. This method accounts for recurring benefits of a pollution prevention action, not just in the year it was implemented, but also in future years. Pollution prevention grants are "two-year" grants with an optional third year for follow-up reporting and case study development. These grants have annual reporting but with a one-year reporting lag due to the grant reporting cycle. A baseline reduction of 1.2 MMTCO₂e is attributed to EPA pollution prevention grants in FY 2019.

Long-Term Performance Goal: By September 30, 2026, EPA's Safer Choice program will certify 2,300 products compared to the FY 2021 baseline of 1,950 total certified products.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM P2sc) Number of products certified by EPA's Safer Choice program.	1,950	2,000	Products	Above Target

Metric Details: This measure tracks the total number of products certified by the Safer Choice program at the end of the year. Safer Choice is a voluntary program that helps consumers, businesses, and purchasers find products that perform and contain ingredients that are safer for human health and the environment. Certified products are verified by EPA to meet the Safer Choice Standard through initial certification, annual audits, and recertification every three years. The total includes Design for the Environment-certified antimicrobial products. Data are tracked in EPA's Safer Choice database. For additional information, see: https://www.epa.gov/saferchoice.

CROSS-AGENCY STRATEGIES

Strategy 1: Ensure Scientific Integrity and Science-Based Decision Making—Deliver rigorous scientific research and analyses to inform evidence-based decision-making.

Long-Term Performance Goal: By September 30, 2026, increase the annual percentage of Office of Research and Development (ORD) research products meeting partner needs to 95% from a baseline of 93% in FY 2021.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM RD1) Percentage of ORD research products meeting partner needs.	93	94	Percent	Above Target

Metric Details: Partner satisfaction is evaluated through a robust survey process. The annual survey engages key users of ORD products. Survey respondents evaluate the scientific rigor of research products (quality), product relevance (usability), and timeliness of product delivery. Each year, 50 products are randomly selected from the universe of products identified as delivered during the previous fiscal year in the Research Approval Planning Implementation Dashboard (RAPID) to be the focus of the survey. Respondent assessments of the 50 products are extrapolated to the total universe of products to determine the numerator. The denominator is the universe of products. The survey results are estimated at a 90% confidence interval of ± 10 products.

Long-Term Performance Goal: By September 30, 2026, implement 126 actions for scientific integrity objectives that are certified by Deputy Scientific Integrity Officials in each EPA program and region.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM RD5) Number of actions implemented for EPA scientific integrity objectives.	No Target Established	21	Actions	Above Target

Metric Details: This measure tracks the number of actions completed by EPA Deputy Scientific Integrity Officials (DSIOs) to implement the scientific integrity objectives that implement the EPA Scientific Integrity Policy (https://www.epa.gov/sites/default/files/2014-02/documents/scientific_integrity_policy_2012.pdf). Each DSIO will certify completion of two actions for each of the three scientific integrity objectives: scientific integrity is highly visible at EPA (Objective 1); all of EPA embraces and models scientific integrity (Objective 2); and robust mechanisms protect and maintain EPA's culture of scientific integrity (Objective 3). Deputy Scientific Integrity Officials are members of the Scientific Integrity Committee representing each EPA program office and region.

Strategy 2: Consider the Health of Children at All Life Stages and Other Vulnerable Populations—Focus on protecting and improving the health of children at all life stages and other vulnerable populations in implementing our programs.

Long-Term Performance Goal: By September 30, 2026, assess and consider environmental health information and data for children at all life stages for all completed EPA actions that concern human health.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM CH01) Percentage of completed EPA actions that concern human health that include assessment and consideration of environmental health information and data for children at all life stages.	50	70	Percent	Above Target

Metric Details: This measure tracks the percentage of EPA actions (e.g., rules, risk assessments, exposure assessments, economic and benefits analyses, research and other products, program implementation guidances, enforcement and compliance efforts and activities, grants, training, partnerships, fact sheets and other communication materials) that have a human health impact and for which children's environmental health information and data was considered and assessed. The intent of this measure is to institutionalize EPA's 2021 Policy on Children's Health (https://www.epa.gov/children/epas-policy-childrens-health), which calls for EPA to protect children from environmental exposures by "consistently and explicitly considering early life exposures and lifelong health in all human health decisions." The baseline is 50% as of February 2022.

(PM CH02) Number of EPA regional offices with stakeholder engagement on children's environmental health designed to provide durable, replicable, and widespread results.	3	5	Regional Offices	Above Target
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Metric Details: This measure tracks the number of EPA regional offices that have developed and are implementing stakeholder engagement activities on children's environmental health that support joint planning, collaboration, or action; identify and address community-scale issues; build federal/state/local "whole-of-government" partnerships; and/or address health disparities. EPA aims to increase outcome-driven stakeholder participation and program visibility.

Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity—Foster a diverse, equitable, and inclusive workforce within an effective and mission-driven workplace.

Long-Term Performance Goal: By September 30, 2026, EPA will be in full compliance with the five high-priority directives in Executive Order 14028 - *Improving the Nation's Cybersecurity*.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM MFA) Percentage of EPA systems in compliance with multifactor authentication requirements.	75	85	Percent	Above Target

Metric Details: This measure tracks EPA implementation of one of the five priority requirements of Executive Order 14028 – Improving the Nation's Cybersecurity (https://www.whitehouse.gov/briefing-room/presidential-actions/2021/05/12/executive-order-on-improving-the-nations-cybersecurity/). Multifactor authentication confirms user identify and ensures only authorized users have access to Agency systems and information. The February 2022 baseline for this measure is 65%.

J and the state of			
(PM DAR) Percentage of EPA data at rest in compliance with encryption	No Target Established	Percent	Above
requirements.	Established		Target

Metric Details: This measure tracks EPA implementation of one of the five priority requirements of Executive Order 14028 – Improving the Nation's Cybersecurity. Encrypting data at rest ensures any unauthorized individual who has gained access to EPA's network or any of its information systems will still be unable to read the data in any meaningful and potentially destructive or malicious way. Initial scoping for this measure will be completed in FY 2022.

(PM DIT) Percentage of EPA data in transit in compliance with encryption	N	No Target	Darraant	Above
requirements.	Es	stablished	Percent	Target

Metric Details: This measure tracks EPA implementation of one of the five priority requirements of Executive Order 14028 – Improving the Nation's Cybersecurity. Encrypting data in transit ensures any unauthorized individual who has gained the ability to monitor network traffic will be unable to read and interpret data in a meaningful and potentially destructive or malicious way. Initial scoping for this measure will be completed in FY 2022.

(PM ZTA) Percentage implementation of an approved "Zero Trust Architecture."	No Target	Darcent	Above
(1 W 21A) I electifiage implementation of an approved Zero Trust Architecture.	Established	Percent	Target

Metric Details: This measure tracks EPA implementation of one of the five priority requirements of Executive Order 14028 – Improving the Nation's Cybersecurity. The "Zero Trust Architecture" security model eliminates implicit trust in any one element, node, or service and instead requires continuous verification of the operational picture via real-time information from multiple sources to determine access and other system

responses. Once implemented, the various components of Agency network infrastructure will be more resistant to unauthorized access. Initial scoping for this measure will be completed in FY 2022.

(PM ALR) Implementation of advanced event logging requirements (EL3) across EPA networks.

EL1 EL3 Tier Above Target

Metric Details: This measure tracks EPA implementation of one of the five priority requirements of Executive Order 14028 – Improving the Nation's Cybersecurity. EPA will implement the highest event logging tier of "Advanced" (EL3) across EPA networks and infrastructure as established by OMB Memorandum M-21-31 – Improving the Federal Government's Investigative and Remediation Capabilities Related to Cybersecurity Incidents. The FY 2020 baseline for this measure is EL0 – "Not Effective."

Long-Term Performance Goal: By September 30, 2026, award 4% of EPA contract spending to small businesses located in Historically Underutilized Business Zones (HUBZones) compared to the FY 2018-2020 average annual baseline of 2.2%.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM SB1) Percentage of EPA contract spending awarded to HUBZone businesses.	3	3.2	Percent	Above Target

Metric Details: This measure tracks the percentage of total EPA prime contracting dollars awarded to firms designated as a certified HUBZone small business awardees in the Federal Procurement Data System. To qualify for certification as a HUBZone firm, the small business must: 1) be at least 51% owned and controlled by U.S. citizens, a Community Development Corporation, an agricultural cooperative, or an Indian tribe; 2) maintain its principal office within a HUBZone; and 3) hire at least 35% of its workforce from a HUBZone area. HUBZones are generally defined to include urban and rural communities with low income, high poverty, or high unemployment.

Long-Term Performance Goal: By September 30, 2026, initiate all priority climate resiliency projects for EPA-owned facilities within 24 months of a completed facility climate assessment and project prioritization.

Annual Performance Goals	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM CRP) Percentage of priority climate resiliency projects for EPA-owned facilities initiated within 24 months of a completed facility climate assessment and project prioritization.		100	Percent	Above Target

Metric Details: This measure tracks initiation of climate adaptation projects at EPA-owned facilities following a climate assessment. EPA will prioritize identified projects based on multiple factors – ability to execute, impact on facility resiliency, cost, etc. – and initiate projects within 24 months of identification as a priority.

Metric Details: This measure tracks completion of climate adaptation assessments at all 20 EPA-owned facilities that will determine which facilities require investments to protect against climate change.

Long-Term Performance Goal: By September 30, 2026, EPA will achieve the highest Diversity, Equity, Inclusion and Accessibility (DEIA) Maturity Level of "Leading and Sustaining" as defined by the November 2021 *Government-wide Strategic Plan to Advance DEIA in the Federal Workforce* and achieve all EPA goals identified in the Agency's Gender Equity and Equality Action Plan.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM DEIA) Diversity, Equity, Inclusivity, and Accessibility (DEIA) Maturity Level achieved.		L1	Level	Above Target

Metric Details: This measure tracks the Agency's progress towards achieving the highest Diversity, Equity, Inclusivity, and Accessibility (DEIA) Maturity Level of Leading and Sustaining as defined by the November 2021 Government-wide Strategic Plan to Advance DEIA in the Federal Workforce, available at: https://www.whitehouse.gov/wp-content/uploads/2021/11/Strategic-Plan-to-Advance-Diversity-Equity-Inclusion-and-Accessibility-in-the-Federal-Workforce-11.23.21.pdf. The Maturity Levels are: Level 1 (L1): Foundational Capacity; Level 2 (L2): Advancing Outcomes; and Level 3 (L3): Leading and Sustaining. Maturity Levels are assessed across four Signals of Maturity: DEIA Approach; Diversity Framework; Organizational Structure; and DEIA Integration.

Long-Term Performance Goal: By September 30, 2026, automate all priority internal administrative processes.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM GOPA) Percentage of priority internal administrative processes automated.		10	Percent	Above Target

Metric Details: This measure tracks completion of transitioning priority administrative forms and/or processes to full automation for improved internal data collection and utilization. Previous examples of administrative process automation include: transitioning OGE-450 Financial Disclosure Forms from electronic documents to a centralized reporting database; paper-based performance reviews to USA Performance; and transitioning Headquarters Transit Subsidy requests from a paper form to a digital approval workflow. In FY 2022, EPA will identify critical internal administrative workflow processes, develop prioritization methodologies, create implementable and repeatable automation processes, and initiate and complete a high-priority workflow automation project. EPA will prioritize identified forms and/or processes based on multiple factors including the number of affected employees, employee time saved, cost savings/avoidance, and support of a hybrid work environment.

Long-Term Performance Goal: By September 30, 2026, automate the major EPA permitting programs.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM PAT) Percentage of EPA permitting processes automated.		10	Percent	Above Target

Metric Details: This measure tracks the Agency's progress toward bringing EPA into the 21st century by transitioning EPA's major permitting programs from paper processes to electronic processes. EPA will advance the paperless transformation through the automation of permit application, review, and issuance processes for EPA's permitting programs. Automation of the permitting processes will reduce processing time on issuing permits, decrease the time between receiving monitoring data and engaging in enforcement actions, and foster transparency by allowing communities to search, track, and access permitting actions easily. Further, permit automation will enable the integration of climate change and environmental justice considerations into permit processes and ensure that they are addressed within the terms and conditions of the permit. For the regulated community, permit automation will allow for a simplified, streamlined, and transparent permitting process which will result in a time and costs savings. In FY 2022, EPA will establish the target number of processes to be automated. Once the target is established, EPA will automate 10% of this universe by the end of FY 2023. The FY 2021 baseline for this measure is zero.

Long-Term Performance Goal: By September 30, 2026, improve 1,000 operational processes.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM OP1) Number of operational processes improved.	200	200	Operational Processes	Above Target

Metric Details: This measure tracks the number of EPA operational processes improved through the application of Lean principles to improve the efficiency and cost effectiveness of the Agency's operations. An operational process is a sequence of activities that results in the delivery of a service. Process improvements are intended to engage leadership, drive innovation, improve operations, create a better customer experience, and empower frontline staff. A process improvement is counted when a baseline measure is exceeded by a reasonable amount, as determined by EPA program or regional office leadership. While a standard percentage improvement is not required, teams are encouraged to have stretch goals to promote breakthroughs. Process improvements result from a variety of tools (e.g., kaizen events, special senior leadership projects, other problem-solving activities) and often include standard work (e.g., standard operating procedures) and visual management (visible placement of information and indicators that quickly convey the status of the process) to help ensure the improvement is sustained and can be shared to promote benchmarking when appropriate.

Other Core Work

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM CF2) Number of Agency administrative systems and system interfaces.	17	17	Systems and Interfaces	Below Target

Metric Details: This measure tracks the number of administrative systems or system interfaces EPA actively operates. Administrative systems support execution of the Agency's administrative functions such as accounting, grants management, and contracts management. System interfaces are connections among administrative systems where data are shared. Reducing the number of administrative systems and system interfaces has a positive impact on streamlining operational processes and drives the integration of financial transactions across multiple administrative systems,

reducing manual entry, improving data quality, and allowing EPA to input and access data more easily and standardize reporting as payment processing is moved to a federal shared service provider.

Strategy 4: Strengthen Tribal, State, and Local Partnerships and Enhance Engagement—Collaborate and engage effectively with Tribal nations in keeping with the Federal Government's trust responsibilities, state and local governments, regulated entities, and the public to protect human health and the environment.

Long-Term Performance Goal: By September 30, 2026, consider Tribal treaty rights as part of all EPA Tribal consultations that may affect Tribal treaty rights.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM EC41) Percentage of EPA Tribal consultations that may affect Tribal treaty rights that consider those rights as part of the consultation.	20	25	Percent	Above Target

Metric Details: This measure tracks the annual percentage of EPA Tribal consultations that may affect Tribal treaty rights that consider those rights as part of the consultation, consistent with the EPA Policy on Consultation and Coordination with Indian Tribes: Guidance for Discussing Tribal Treaty Rights (https://www.epa.gov/tribal/epa-policy-consultation-and-coordination-indian-tribes-guidance-discussing-tribal-treaty) which establishes clear Agency standards for consultations when an EPA action or decision may affect tribal treaty rights. Data are collected in EPA's Tribal Consultation Opportunities Tracking System, a publicly accessible database used to communicate upcoming and current EPA consultation opportunities to tribal governments that documents EPA consultations using the tribal treaty rights guidance. The system provides a management, oversight, and reporting structure that helps ensure accountability and transparency.

Long-Term Performance Goal: By September 30, 2026, eliminate the backlog of overdue Freedom of Information Act (FOIA) responses, compared to the FY 2021 baseline of 1,056.

Annual Performance Goal	FY 2022 Target	FY 2023 Target	Units	Preferred Direction
(PM FO2) Number of FOIA responses in backlog.	845	634	Responses	Below Target

Metric Details: This measure tracks EPA's responsiveness to the public by measuring progress toward reducing EPA's backlog of responses to FOIA requests. Overdue responses are indicated in FOIAonline.gov as pending beyond the statutory deadline of 20 working days for simple requests, 30 days or longer for unusual circumstances (e.g., complex requests), or another timeframe to which the requestor has agreed. EPA receives approximately 7,500 FOIA requests annually. There were 1,056 overdue FOIA requests as of FY 2021.

Environmental Protection Agency FY 2023 Annual Performance Plan and Congressional Justification

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EPA FY 2023 Annual Evaluation Plan

The Foundations for Evidence-Based Policymaking Act (Evidence Act) provides a framework to promote a culture of evaluation and continuous learning to ensure Agency decisions are made using the best available evidence. EPA's FY 2023 Annual Evaluation Plan (AEP) describes significant program evaluations the Agency plans to undertake in FY 2023. The Agency's FY2023 AEP includes program evaluations that assess program outcomes, support program improvement, and aid decision making,

Office of Chemical Safety and Pollution Prevention (OCSPP)

Title	EPA-Supported WPS Training of Farmworkers			
Lead National Program	Office of Chemical Safety and Pollution Prevention			
Strategic Goal,	Goal 7: Ensure S	Goal 7: Ensure Safety of Chemicals for People and the Environment		
Objective, and/or	Objective 7.1: Ensure Chemical and Pesticide Safety			
Cross-Agency Strategy				
Planned start date	October 2022	Planned completion date	September 2023	

Purpose and description: EPA provides funding through a five-year cooperative grant to train farmworkers in accordance with the Agricultural Worker Protection Standard (WPS) rule. WPS pesticide safety training is an annual requirement. This activity will assess the number of individuals trained and the effectiveness of the training.

Programmatic or policy decisions this activity will inform: Effectiveness and scope of the EPA-supported WPS training.

Question(s) this activity will address:

- How many farmworkers are receiving EPA-supported annual training required under the WPS rule, and what is their knowledge retention of the material?
- Is EPA funding under the grant resulting in quality training? Is the grantee fulfilling the conditions of the grant in a satisfactory manner?

Data, tools, method/analytical approach: Data will include critical datasets from the grantee, including the number of individuals trained in WPS as well as the results from pre- and post-assessments given to the trainees to determine knowledge gained about WPS and knowledge comprehension. The Office will assess whether additional data-gathering will need to be conducted as part of the assessment's data collection plan.

Anticipated challenges and proposed solutions: The COVID-19 public health emergency may continue to influence the grantee's ability to conduct training. Social distancing and other COVID protection strategies, such as smaller training groups, can result in fewer trained. Remote training also may present technical challenges for some workers. In-person training is the preferred method

to engage with trainees; the grantee and agricultural establishments will continue to implement strategies to address the pandemic-related obstacles while meeting the training needs.

Dissemination of findings: Information used in this evidence gathering will be made publicly available in the Annual Reports on PRIA Implementation (https://www.epa.gov/pria-fees/annual-reports-pria-implementation). Information and any findings also will be shared with appropriate EPA staff and management.

Title	IT Modernization of EPA Pesticide Tracking Systems			
Lead National Program	Office of Chemical Safety and Pollution Prevention			
Strategic Goal,	Goal 7: Ensure Safety of Chemicals for People and the Environment			
Objective, and/or	Objective 7.1: Ensure Chemical and Pesticide Safety			
Cross-Agency Strategy				
Planned start date	April 2019	Planned completion date	September 2023	

Purpose and brief Description: *Background:* In 2019, EPA kicked off Phase 1 of a multi-year digital transformation to create a fully electronic workflow for EPA registration and reevaluation activities. This effort builds on the 2016 launch of the Pesticide Submission Portal, a secure, webbased portal in EPA's Central Data Exchange (CDX) environment through which the public can electronically submit applications for EPA assessment. In mid-2020, a pilot of the new system went live for one of the three regulatory divisions within the Office of Pesticide Programs (OPP), as well as the Information Technology and Resource Management Division (ITRMD) which inprocesses all applications. In early 2021, a second regulatory division in OPP entered the pilot. The pilot is specific to registration application workflows under the Pesticide Registration Improvement Act (PRIA) and its reauthorizations.

Purpose and description: The next phase of the effort will be development of additional workflows and expansion to all of the divisions in the OPP that support registration and reevaluation regulatory activities. By improving the employee and user experience, and, later, improving the customer experience, EPA will enhance the ability of the regulated community, other stakeholders, partners, and the American public to directly engage with the regulatory and science efforts.

Programmatic or policy decisions this activity will inform: Digital transformation to a single system will inform additional IT system development and facilitate enterprise resilience through strategic planning, proactive risk management, effective organizational change management and capacity planning, as well as emergent technologies. Managers will be able to monitor task assignments throughout their organizational unit, while leaders will be able to see the progress and timeliness of all registrations and registration review cases Predictive algorithms will help determine where skills gaps lie so targeted hiring decision can be applied to remove bottlenecks. Employees also will have access to assessment data in one place and augmented intelligence tools being built into the new system will eventually automate administrative tasks, allowing staff to focus on tasks that bring a higher efficiency and rigor to the science. Robotic Process Automation (RPA) will enable automation of many routine tasks allowing the scientists and regulatory specialists to focus on higher value work.

Question(s) this activity will address: How does a fully electronic workflow for EPA registration and reevaluation activities affect EPA employee work processes, such as the timeliness and efficiency of reviews?

Data, tools, method/analytical approach: Data from EPA's PRISM and OPPIN systems measuring how much time is spent at each stage of the risk assessment will allow EPA to establish a baseline and assess improvement in the overall review processes for registration and registration review cases. The Salesforce interface currently being piloted for antimicrobial and biopesticide applications will allow EPA to establish baselines for how much time is spent at each stage and assess improvement in review processes supporting new active ingredients registration determinations. In addition, the augmented intelligence and advance data analytics within Salesforce will allow EPA to identify stages in the review process that present bottlenecks, allowing further system development and/or resource allocation to address identified concerns.

Anticipated challenges and proposed solutions: OCSPP is currently awaiting award of the Mission Support IT Contract to continue work on the digital transformation. Current contracts supporting development and operations and maintenance of systems expire in November, thereby making the award of the new contract urgent.

Dissemination of findings: Process improvements relating to pesticide registration and registration review activities, as well as information technology improvements, are described annually in the PRIA annual report (https://www.epa.gov/pria-fees/annual-reports-pria-implementation). Information and any findings also will be shared with appropriate EPA staff and management.

Office of Land and Emergency Management

Title	Gathering Data on Results of Newly Required Annual and Triennial					
	Testing to Evaluate Impacts of U.S. EPA's 2015 Federal					
	Underground Storage Tank Regulation.					
Lead National Program	Office of Land and Emergency Management					
Strategic Goal,	Goal 6: Safeguard and Revitalize Communities					
Objective, and/or	Objective 6.2: Reduce Waste and Prevent Environmental					
Cross-Agency Strategy	Contamination					
Planned start date	January 2022 Planned completion date January 2023					

Purpose and brief Description: The purpose of this study is to understand how newly required Underground Storage Tank (UST) compliance testing requirements included in the 2015 updated UST regulation impacted the number of tests conducted to achieve a passing compliance test result. To this end, EPA's Office of Underground Storage Tanks (OUST) plans to collect failing and passing test counts for four newly required UST compliance tests over a six-year period from 2015-2021 within 17 states and territories whose compliance deadlines fell before the end of 2021. OUST will submit an information collection request (ICR) to covering this data gathering activities; After the ICR is approved, OUST will task a contractor with collecting the information from a census of 120 UST compliance testing companies, who conduct the compliance tests, within these 17 states.

Programmatic or policy decisions this activity will inform: This study will help OUST to better understand the impacts of the new requirements included in the 2015 update to UST regulations. OUST will share the information from the study with implementing agencies, who may use the information to better target resources and compliance assistance efforts. The information will help OUST plan outreach and technical assistance, may help to inform future EPA rulemaking efforts.

Question(s) this activity will address:

- Does the inclusion of four new operation and maintenance compliance requirements, which require a UST owner/operator to achieve a passing test result at least every one or three years, improve release prevention efforts (as measured by fewer tests required per each passing test result) by incentivizing owners/operators to better maintain required safety equipment or rapidly replace this equipment when necessary?
- Which, if any, required equipment poses more frequent operation and maintenance challenges? How EPA and implementing agencies can best target compliance assistance or enforcement efforts most effectively?

Data, tools, method/analytical approach: OUST will use data on the number of failing and passing test results for each of four types of compliance tests conducted from the period 2015-2021 within 17 states and territories. OUST plans to use a contractor to collect this information from a census of 120 UST compliance testing companies operating in these states. OUST will work with an EPA economist to analyze the information collected and determine whether statistically significant conclusions may be drawn about changes in passing test rates over the two three-year periods of the study. OUST developed a data submission template to share with respondents.

Anticipated challenges and proposed solutions: Since the study will collect information from a census of 120 UST compliance testing companies, EPA anticipates challenges in participation from all respondents due to the burden of reporting the information. EPA anticipates higher participation rates from larger compliance testing companies. EPA plans to collect information that will allow us to weight results to represent the entire population, rather than equally weighting only those who choose to respond, which would bias results in favor of larger companies who are likely to represent larger owner/operators.

Dissemination of findings: The summary of the results will be shared with regional, state, and industry partners and on EPA's website within the OUST page. Information and any findings also will be shared with appropriate EPA staff and management.

EPA FY 2023 Annual Plan for Evidence-Building Activities

The Foundations for Evidence-Based Policymaking Act (Evidence Act) provides a framework to promote a culture of evaluation and continuous learning to ensure Agency decisions are made using the best available evidence. EPA's FY 2023 Annual Plan for Evidence-Building Activities describes Agency plans for significant evidence-building across a range of program areas. In this section EPA describes evidence-building activities other than program evaluation⁷³⁰, such as data analysis, foundational fact finding, research, statistical analysis, continuous process improvement, and performance measurement. This document shares examples of evidence-building that supports EPA's decision-making in response to Administration priorities, Congressional mandates, and management priorities.

The first part of this document gives an overview of EPA's evidence-building activities in support of the Agency's Learning Agenda, which is part of the FY 2022 - 2026 EPA Strategic Plan. This part is organized by Learning Priority Area. The second part of this document, the Other Evidence-Building Activities, is organized by national program.

Evidence-Building Activities Supporting EPA's Learning Agenda

Expanding EPA's Toolkit of Air Benefits Assessment Methodologies and Practices

Lead National Program	Office of Air and Radiation		
Strategic Goal and	Goal 4: Ensure Clean and Healthy Air for All Communities		
Objective supported	Objective 4.1: Improve Air Quality and Reduce Localized Pollution		
	and Health Impacts		
Planned start date	October 2022	Planned completion date	September 2023

Purpose and brief Description: EPA uses well-established methods for estimating the health benefits associated with reductions in some pollutants. However, as noted by scientific bodies including the NAS and SAB⁷³¹, there are areas where the science of air pollution effects continues to advance and there are benefits that EPA does not currently quantify and monetize.

Programmatic or policy decisions this activity will inform: This activity will improve EPA's ability to: (1) characterize the health benefits of improved air quality within Environmental Justice communities; (2) account for the role of air pollution in promoting the progression of chronic disease and subsequent death; (3) quantify the health benefits of toxic air pollutants.

⁷³⁰ For descriptions of significant program evaluations, please see EPA's FY2023 Annual Evaluation Plan

⁷³¹ National Research Council. 2002. Estimating the Public Health Benefits of Proposed Air Pollution Regulations. Washington, DC: The National Academies Press.https://doi.org/10.17226/10511. National Research Council. 2008. Estimating Mortality Risk Reduction and Economic Benefits from Controlling Ozone Air Pollution. Washington, DC: The National Academies Press.https://doi.org/10.17226/12198.

Question(s) this activity will address:

- What are the health benefits of reducing human exposures to air pollutants not currently quantified, particularly those related to hazardous air pollutants (HAPs)?
- What are the health benefits of reducing the risk of air pollution-related effects that are challenging to quantify but nonetheless important to the exposed populations?
- What are the benefits of health outcomes that cannot yet be valued using Willingness-to-Pay or other measures of economic value?
- How can we account for sequelae and the progression of disease when quantifying benefits?

Data, tools, method/analytical approach: Addressing the above questions will require access to economic and health datasets providing information on health effect incidence, health outcomes, and health care expenditures. We would apply these newly developed techniques using existing Agency tools, including the environmental Benefits Mapping and Analysis Program (BenMAP).

Anticipated challenges and proposed solutions: Addressing questions of the scope and complexity of those above will require significant contract resources and additional FTE (in particular, economists, biostatisticians and air pollution epidemiologists).

Dissemination of findings: Project materials will be made available through the EPA website. Information and any findings also will be shared with appropriate EPA staff and management.

Drinking Water Systems Out of Compliance

Lead National Program	Office of Enforcement and Compliance Assurance		
Strategic Goal,	Goal 3: Enforce Environmental Laws and Ensure Compliance		
Objective, and/or	Objective 3.2: Detect Violations and Promote Compliance		
Cross-Agency Strategy			
Planned start date	October 2022	Planned completion date September 2023	

Purpose and description: Drinking water noncompliance is greatest in small, disadvantaged communities and may be higher than EPA data suggests due to failures to monitor and report. The Drinking Water Systems out of Compliance learning priority area in EPA's Learning Agenda aims to increase drinking water compliance rates through evaluation of key program components identified by stakeholder experts.

Office of Enforcement and Compliance Assurance (OECA), Office of Water (OW), and the Drinking Water Systems out of Compliance learning priority workgroup are assessing drinking water data reported to EPA to determine whether it accurately measures national compliance and substantiates EPA policy decisions; considering noncompliance root causes and corresponding technical/managerial/financial factors; and testing efficacy of technical assistance, enforcement, and state oversight.

The assessments, once complete, will identify key water system characteristics for which EPA and states should focus its policies and the most effective way to apply compliance assurance tools for increasing compliance in the drinking water program.

OECA anticipates FY2023 funds will support finalizing Question 1 – access to data for measuring drinking water compliance; completing Question 2 – root cause analysis of system compliance; and conducting prospective studies for Question 3 – efficacy of enforcement on compliance. EPA/OECA anticipate beginning work on questions 4 and 5 in future years.

For Question 1, OECA developed a detailed work plan for assessing Safe Drinking Water Information System (SDWIS) data quality and determining if sample results data provide better insight into compliance. Existing reports and audits on SDWIS data quality have been reviewed for data quality issues, program file review reports are being reviewed and OECA is in the process of securing states' sample results data to compare to SDWIS data as a quality check. In FY 2021, OECA synthesized information from existing assessments of the quality of EPA's drinking water data for Question 1. EPA also has begun analyzing existing information for Questions 2 and 3. In FY 2023, for Questions 2 and 3, those analyses will continue and OECA will conduct work to determine root causes of compliance and to assess the influence of enforcement and inspection activities on compliance, which may include planning for randomized control trial studies – especially likely for Question 3.

Programmatic or policy decisions this activity will inform: Applying compliance assurance tools to effectively increase drinking water compliance rates.

Question(s) this activity will address:

- Does EPA have ready access to data to measure drinking water compliance reliably and accurately?
- What factors determine system noncompliance and optimal performance?
- Does increased use of compliance assurance tools (inspections and enforcement) improve system compliance, and if so under what circumstances?
- How can EPA determine if a system has the technical, managerial, and financial capacity to provide safe water on a continuous basis to its customers?
- What EPA oversight activities are effective at assessing and improving state programs' ability to drive compliance?

Data, tools, method/analytical approach: Question 2 Root Cause Analysis: The analysis will identify key system characteristics associated with noncompliance and continual compliance using the Agency's existing correlative and anecdotal data. Systems would likely be stratified by categories such as tribal versus non-tribal, rural versus urban, to identify system characteristics that correlate with compliance performance trends. This question seeks to identify the variation in challenges systems start with and how those challenges affect compliance rates. EPA's objective is to then acquire empirical evidence on the causal factors that lead to noncompliance and, on the positive side, optimal system performance.

Question 3 Enforcement and Inspection Efficacy: In future years, the Agency will empirically test the impact of increased use of compliance monitoring inspections and enforcement actions as compared to the status quo practice of heavily relying on sanitary surveys and other types of assistance. This priority question complements the Drinking Water National Compliance Initiative (NCI), EPA's increased use of inspections and enforcement for drinking water compliance could

be planned such that those activities form the basis of a prospective study to inform the evaluation. The results of the study could inform future compliance assurance strategies either as part of or beyond the NCI.

Anticipated challenges and proposed solutions: Dependent on high stakeholder engagement and participation (states, academic institutions, EPA management and staff, etc.)

Dissemination of findings: Final reports will be posted publicly on EPA's website. Information and any findings also will be shared with appropriate EPA staff and management.

Workforce Planning

Lead National Program	Office of Mission Su	pport (OMS)		
Strategic Goal,	Cross-Agency Strate	gy 3: Advance EPA's Orga	anizational Excellence	
Objective, and/or	and Workforce Equity			
Cross-Agency Strategy	_			
Planned start date	October 2022	Planned completion date	September 2023	

Purpose and description: EPA identified Human Capital Management as an Enterprise Risk due to the high number of staff eligible for retirement and EPA's aging workforce. The Workforce Planning learning priority area in EPA's Learning Agenda will develop an evidence-based roadmap for how EPA can ensure it has employees with the competencies needed to achieve its mission now and in the future. It also will help determine the overall processes required to cultivate and manage the workforce, while anticipating internal and external changes, and continuously maximizing the efficiency and effectiveness of the Agency's Human Resources services.

Programmatic or policy decisions this activity will inform: Near and long-term strategies to attract, recruit, train, and retain a diverse and effective workforce.

Question(s) this activity will address:

- Does EPA have access to the tools and strategies needed to analyze and understand the Agency's near and long-term workforce needs?
- What are the critical skills needed to support the Agency's mission, now and in the future?
- What are the best strategies to attract, recruit, train, and retain a diverse workforce? What makes people stay in the Agency long-term?
- What is the best way to ensure knowledge is transferred from outgoing to current and incoming staff to support succession planning?

Data, tools, method/analytical approach: EPA will enhance the Agency's competency assessment tool and conduct skills assessments for the Agency's Mission Critical Occupations (MCOs). In this activity, the Agency will first revalidate its MCOs to ensure the correct positions and competencies are assessed. The Agency also will enhance EPA's competency assessment tool and conduct skills gap analyses among its Agency-specific MCOs. EPA will analyze internal and external recruitment strategies, enhance employee engagement strategy, develop an employee career progression model; and conduct an attrition cause analysis. EPA has various data sets and tools to capture employee demographic, hiring, and attrition data, but no current agencywide data

sets exist on current and future employee skills and competencies. To develop such data sets, EPA will use internal and contractor support to gather information from various internal and external stakeholders, including but not limited to: EPA employees and supervisors, the Human Resource Officer/Program Management Officer (HRO/PMO) community, Human Resources Council, First Line Supervisor Advisory Group (FLAG), senior leaders, and members of the external human resources academic and practitioner community. Surveys, literature reviews, focus groups, interviews, and other quantitative and qualitative methods will be used to obtain needed information. Cost-benefit analysis, benchmarking, and appropriate quantitative and qualitative analyses will be used along with other analytical approaches. Data will be managed consistent with security and privacy requirements.

Anticipated challenges and proposed solutions: There might be low participation among stakeholders in the assessment and analysis of the four workforce priority questions. This possible challenge will be mitigated by enlisting the buy-in and support of senior leaders, the Human Resources Council, and other key stakeholders to help promote the process prior to its start and keeping in constant contact with those stakeholders during the evaluation and analysis process.

Dissemination of findings: The identified workforce activities are considered key components of management's strategic decision-making process; findings will be shared consistent with requirements related to information that may be privileged or prohibited from disclosure. It is anticipated relevant results will be shared with internal stakeholders, including senior leaders and EPA's Human Resource Officer/Program Management Officer community. Aggregate information on findings might be shared with other federal agencies and/or publicly.

Grant Commitments met

Lead National Program	Office	of	the	Administ	trator/Office	of	Congress	sional	and
	Intergov	ernm	ental	Relations					
Strategic Goal,	Cross-A	gency	Str	ategy 4:	Strengthen	Triba	al, State,	and	Local
Objective, and/or Cross-	Partners	ships a	ınd E	nhance En	gagement.				
Agency Strategy									
Planned start date	October	2022		Planned	completion	date	September	r 2023	

Purpose and description: Every year, EPA awards over \$4 billion in grants and other assistance agreements. Through these grants, EPA helps to protect human health and the environment through the work of its grantees. The goal of the Grant Commitments Met learning priority area in EPA's Learning Agenda is to learn whether grant program accomplishments achieve the intended environmental results and to build a comprehensive system for tracking and reporting grant program outputs and outcomes by collecting and analyzing data and information on the Agency's practices for tracking and reporting grant program outputs and outcomes.

The Agency Learning Agenda outlines work to establish the baseline, assess the current state, define the future state, and begin grant program reviews. This effort spans three fiscal years, FY2021 through FY2023. Beyond FY2023, it is anticipated that the Agency will implement a regular schedule of grant program reviews.

Programmatic or policy decisions this activity will inform: Practices and tools to effectively track whether grantees are fulfilling their workplan grant commitments, including outputs and environmental outcomes.

Question(s) this activity will address:

- How are the Agency's grant programs meeting their intended purpose?
- What data and information exists to provide a baseline assessment of the Agency's grant and tracking systems?
- Which criteria are used to assess the ability of programs to successfully monitor grantee performance?

Data, tools, method/analytical approach: EPA is surveying all active EPA grant programs to determine the universe of existing grant reporting and tracking systems. The surveys are intended to provide the data and information needed to understand existing Agency approaches and processes for collecting, monitoring, reporting, and evaluating grant commitments. These data will provide a baseline inventory of what the Agency's grant programs are collecting and how the national programs are using the grant commitment information. Preliminary analyses are defining the current state of the Agency's grant commitment tracking and serve as the foundation for answering the Learning Agenda questions planned for FY2022 and FY2023.

EPA is comparing the current state of grants management to an ideal future state, considering the programmatic and statutory requirements unique to each grant program, and available tools for programmatic monitoring. A workgroup will develop criteria to assess the ability of programs to successfully monitor grantee performance, with a specific focus on tracking environmental outcomes and outputs. This activity will inform the next phase (Learning Agenda Question 2), which will analyze the Agency's ability to review progress made in protecting human health and the environment through its grant programs and demonstrate how EPA's grants programs are achieving the intended environmental results.

Anticipated challenges and proposed solutions: Dependent on high stakeholder engagement and participation (states, academic institutions, EPA management and staff, etc.)

Dissemination of findings: Final reports will be posted publicly on EPA's website. Information and any findings also will be shared with appropriate EPA staff and management.

Other EPA Evidence-Building Activities

Office of Air and Radiation (OAR)

Title	Title V Permitting Program Reviews			
Lead National Program	Office of Air and Radiation			
Strategic Goal,	Goal 4: Ensure Clean and Healthy Air for All Communities			
Objective, and/or Cross-	Objective 4.1: Improve Air Quality and Reduce Localized Pollution			
Agency Strategy	and Health Impacts			
Planned start date	October 2022	Planned completion date	September 2023	

Purpose and description: EPA periodically assesses state and local permitting programs, including the sufficiency of fees collected, under Title V of the Clean Air Act as part of its responsibility to oversee delegated and approved air permitting programs.

Programmatic or policy decisions this activity will inform: In general, these analyses identify good practices, document areas needing improvement, and inform how EPA can help the permitting agencies improve their performance.

Question(s) this activity will address:

- What are some good practices and areas of improvement in state and local permitting programs under Title V of the Clean Air Act?
- How can EPA help the permitting agencies improve their performance?

Data, tools, method/analytical approach: In general, EPA uses a questionnaire to gather preliminary information, reviews files maintained on permits, conducts site visits, and follows up with the permitting program to clarify information in conducting a Title V program assessment.

Anticipated challenges and proposed solutions: The Agency conducts these analyses annually and does not anticipate challenges.

Dissemination of findings: The Title V Permit analyses are posted on <u>EPA's website</u>. Information and any findings also will be shared with appropriate EPA staff and management.

Title	Our Nation's Air: Status and Trends Through 2021			
Lead National Program	Office of Air and Radiation			
Strategic Goal,	Goal 4: Ensure Clean and Healthy Air for All Communities			
Objective, and/or Cross-	Objective 4.1: Improve Air Quality and Reduce Localized Pollution			
Agency Strategy	and Health Impacts			
Planned start date	October 2022	Planned completion date	September 2023	

Purpose and description: EPA is committed to protecting public health and the environment by improving air quality and reducing air pollution. This annual report presents the trends in the

nation's air quality and summarizes the detailed information found at EPA's Air Trends website and other air quality and emissions data.

Programmatic or policy decisions this activity will inform: This activity provides an annual assessment of air quality in an accessible format, allowing EPA, states, and other stakeholders to understand how air quality is changing both in their local area and across the nation. Stakeholders can use this information to help inform their decisions in their air quality programs.

Question(s) this activity will address:

- Where are areas experiencing air quality above the national ambient air quality standards?
- Are these areas trending toward improving air quality?

Data, tools, method/analytical approach: Existing data is pulled from several sources to generate the report such as the National Emission Inventory (NEI) and Air Quality System (AQS).

Anticipated challenges and proposed solutions: The Agency produces this report annually and does not anticipate challenges. This activity is contingent upon air quality data availability from state, local, and tribal air pollution control agencies.

Dissemination of findings: This report is annually included on <u>EPA's Air Trends website</u>. Information and any findings also will be shared with appropriate EPA staff and management.

Office of Chemical Safety and Pollution Prevention (OCSPP)

Title	TSCA Risk Evaluation and Management Activities				
Lead National Program	Office of Chemical Safety and Pollution Prevention				
Strategic Goal,	Goal 7: Ensure Safety of Chemicals for People and the Environment				
Objective, and/or	Objective 7.1: Ensure Chemical and Pesticide Safety				
Cross-Agency Strategy					
Planned start date	October 2022	Planned completion date	September 2023		

Purpose and description: OCSPP's Office of Pollution Prevention and Toxics (OPPT) will continue to stand up a project management program that eventually will support all major activities in the office. A primary area in which this effort is expected to contribute is the planning and execution of risk evaluation and risk management actions taken by EPA under TSCA.

Programmatic or policy decisions this activity will inform: This activity will inform the understanding of how is meeting TSCA's mandates and how this can be improved, as well as what appropriate measures are for tracking performance.

Question(s) this activity will address: Can the processes currently used to develop TSCA risk evaluations and risk management actions be improved?

Data, tools, method/analytical approach: Critical data sets include performance metric targets and results and any other data sets that could point to a need for operational improvements. For some aspects of this work, new information will be developed to establish a baseline for future

measurement. The project management approach and tools will be used to understand, plan, and improve TSCA implementation.

Anticipated challenges and proposed solutions: OCSPP does not anticipate major challenges, but the adoption of new approaches across a highly technical and complex program will take time to realize results. Similarly, TSCA timelines for risk evaluation and risk management actions run for about five years per chemical, so improvements may not be able to be demonstrated immediately.

Dissemination of findings: OCSPP will make results publicly available via performance reporting. Information and any findings also will be shared with appropriate EPA staff and management.

Title	Effectiveness of OCSPP Pollution Prevention Activities			
Lead National Program	Office of Chemical Safety and Pollution Prevention			
Strategic Goal,	Goal 7: Ensure Safety of Chemicals for People and the Environment			
Objective, and/or	Objective 7.2: Promote Pollution Prevention			
Cross-Agency Strategy				
Planned start date	October 2022	Planned completion date	September 2023	

Purpose and description: The Pollution Prevention (P2) Program seeks to alleviate environmental problems by leveraging business-relevant approaches to achieve significant reductions in the generation of hazardous releases to air, water, and land; reductions in the use of hazardous materials, which also advances EPA's chemical risk reduction and management goals under the Toxic Substances Control Act (TSCA); reductions in the generation of greenhouse gases; and reductions in the use of water. As a result of these preventative approaches, the P2 Program helps businesses and others reduce costs and access market opportunities.

Programmatic or policy decisions this activity will inform: The review will assess the degree of progress and effects of the P2 Programs, as well as the utility of performance measures (APG, LTPG, internal operational metrics) for the Program.

Question(s) this activity will address:

- What are the effects of EPA's P2 Program on different stakeholders' outcomes?
- What is the potential pace of the Safer Choice Program when appropriately resourced?

Data, tools, method/analytical approach: Critical data sets include data collected as part of the P2 Program, the existing list of Safer Choice products, and performance metric targets and results and any other data sets that could point to a need for operational improvements.

Anticipated challenges and proposed solutions: OCSPP does not anticipate any major challenges in gathering relevant data.

Dissemination of findings: OCSPP will make results publicly available via performance reporting. Information and any findings also will be shared with appropriate EPA staff and management.

Title	Reducing Use of Animals in Chemical Testing						
Lead National Programs	Office of Chemical Safety and Pollution Prevention and Office of						
_	Research and Development						
Strategic Goal,	Goal 7: Ensure Safety of Chemicals for People and the						
Objective, and/or	Environment						
Cross-Agency Strategy	Objective 7.1: Ensure Chemical and Pesticide Safety						
Planned start date	October 2020 Planned completion date October 2035						

Purpose and description: OCSPP and ORD have been world leaders in advancing the science of moving away from the use of animals for toxicity testing. In June of 2020, EPA released, "New Approach Methods Work Plan: Reducing Use of Animals in Chemical Testing," which provides a workplan to develop metrics for reducing the use of mammalian laboratory animals in both research and for safety evaluations for pesticides and industrial chemicals.

Additionally, the U.S. Government Accountability Office (GAO) released a report to Congress in 2019 recommending that Federal agencies develop metrics to assess the progress made toward reducing, refining, and replacing animal use in testing. EPA implemented activities and policies over the past several years that demonstrate significant reductions in the number of animals used in testing and saving resources for the Agency and stakeholders.

Programmatic or policy decisions this activity will inform: OCSPP primarily uses laboratory animal data for assessing the risks of pesticides and industrial chemicals under FIFRA and TSCA. This effort will support metrics that show progress regarding the move away from this historical paradigm towards replacing animal studies with new approach methods that are more efficient and more human relevant.

Question(s) this activity will address:

- What progress is being made towards achieving the goal of reducing mammal study requests and funding by 30 percent by 2025?
- What progress is being made towards achieving the goal of eliminating mammalian study requests and funding by 2035?

Data, tools, method/analytical approach: OCSPP tracks the reduction and replacement metrics through internal committees, primarily the Hazard and Science Policy Council (HASPOC) and the Chemistry and Acute Toxicology Science Advisory Council (CATSAC) and division-level processes.

OCSPP is in the process of an Analysis of TSCA Available, Expected and Potentially Useful Information (ATAEPI) that will provide the foundation for developing metrics for TSCA-specific activities in this area.

Anticipated challenges and proposed solutions: Under TSCA, there is no defined set of toxicology data requirements which makes establishing baselines difficult. In addition, OCSPP

needs to develop the processes for tracking and working towards publicly accessible metrics where the submitted data are protected as TSCA CBI.

Accelerating progress towards adopting new approach methods requires the availability of approaches that are "equal to or better than" the typically used animal studies. Other activities described in the June 2020 workplan will address this challenge.

Dissemination of findings: EPA efforts to reduce use of animals in chemical testing is reported in the <u>Annual Reports on PRIA Implementation</u>. In the future, OCSPP also will publish metrics on its website. Information and any findings also will be shared with appropriate EPA staff and management.

Title	Pesticide Regist	Pesticide Registration Review			
Lead National Program	Office of Chemical Safety and Pollution Prevention				
Strategic Goal,	Goal 7: Ensure Safety of Chemicals for People and the Environment				
Objective, and/or	Objective 7.1: Ensure Chemical and Pesticide Safety				
Cross-Agency Strategy					
Planned start date	October 2022	Planned completion date	September 2023		

Purpose and description: Review will assess the degree of progress and timely completion of docket openings, draft risk assessments, and case completions for the second cycle of registration review.

Programmatic or policy decisions this activity will inform: Decisions on whether any changes are needed to performance measures or the process for completion of pesticide registration review activities.

Question(s) this activity will address:

- Do OCSPP's processes for meeting registration review statutory timeframes warrant further revision?
- Should OCSPP develop a new suite of performance measures to measure current or new processes, and if so, what are the options?

Data, tools, method/analytical approach: Critical data sets include performance metric targets and results and any other data sets that could point to a need for operational improvements.

Anticipated challenges and proposed solutions: OCSPP does not anticipate any major challenges in gathering performance data. Expert input will be brought to bear on any challenges and possibility that solutions will be needed.

Dissemination of findings: OCSPP will make results publicly available via performance reporting. Information and any findings also will be shared with appropriate EPA staff and management.

Title	ESA Effects Determinations for Listed Species			
Lead National Program	Office of Chemical Safety and Pollution Prevention			
Strategic Goal,	Goal 7: Ensure Safety of Chemicals for People and the Environment			
Objective, and/or	Objective 7.1: Ensure Chemical and Pesticide Safety			
Cross-Agency Strategy				
Planned start date	October 2022	Planned completion date	September 2023	

Purpose and description: The Endangered Species Act (ESA) requires that the actions of federal agencies do not jeopardize the continued existence of federally threatened or endangered species or destroy or adversely modify their critical habitat. EPA is developing a process to incorporate ESA determinations into its new active ingredient registration process and to work towards more routine considerations of ESA determinations for registration review decisions. EPA anticipates integrating ESA considerations into its new active ingredient registrations and registration review decisions at an increasing frequency over the next 5 years.

Programmatic or policy decisions this activity will inform: Decisions on whether any changes are needed to the processes for incorporating ESA effects determinations into OSCPP's risk assessments supporting registration and registration review activities.

Question(s) this activity will address:

- Do OCSPP's processes for developing ESA effects determinations warrant further revision?
- Should OCSPP develop a new suite of performance measures to measure current or new processes, and if so, what are the options?

Data, tools, method/analytical approach: Critical data sets include EPA workflow tracking systems and stand-alone reports on ESA-related risk assessment activity and label mitigation. Tools and analytical methods listed above would not be needed for this exercise.

Anticipated challenges and proposed solutions: OCSPP does not anticipate any major challenges in gathering performance data. Expert input will be brought to bear on any challenges and possibility that solutions will be needed.

Dissemination of findings: OCSPP will make results publicly available via performance reporting. Information and any findings also will be shared with appropriate EPA staff and management.

Office of Enforcement and Compliance Assurance (OECA)

Title	Compliance Learning Agenda				
Lead National Program	Office of Enforcement and Compliance Assurance				
Strategic Goal,	Goal 3: Enforce Environmental Laws and Ensure Compliance				
Objective, and/or Cross-	Objective 3.2: Detect Violations and Promote Compliance				
Agency Strategy					
Planned start date	To be determined	Planned completion date	To be determined		

Purpose and description: OECA is developing a compliance learning agenda in collaboration with states, Tribes, and academics to improve the effectiveness of enforcement and compliance programs, approaches, and tools. With cross-agency participation, OECA will support a venue for EPA, states, Tribes, and territories to collaborate on prioritizing the most pressing programmatic questions; planning evidence-based studies to address these questions; and identifying effective and innovative approaches for improving compliance. OECA anticipates finalizing the compliance learning agenda by the end of FY 2022, with projects beginning and/or continuing through FY 2023.

Programmatic or policy decisions this activity will inform: Projects produced from the compliance learning agenda will inform compliance program improvements and innovative enforcement remedies.

Question(s) this activity will address:

[NOTE: This list is expected to be refined by OECA in conjunction with state, Tribe and territory co-regulators, as well as academic experts and other stakeholders.]:

- Do <u>formal</u> enforcement approaches achieve similar levels of compliance?
- What are the effects of different data sharing/transparency models on compliance rates for regulated facilities (federated vs. non-federated)?
- What is the relative value of onsite vs. offsite compliance monitoring activities?
- What are the circumstances under which provision of compliance assistance is effective in producing improved compliance?

Data, tools, method/analytical approach: EPA will leverage and/or create critical data sets use Agency systems along with obtaining relevant and germane data and information from outside parties. Identify any tools (e.g., statistical software, models, sensors) that will be used, the method (e.g., survey instrument, literature review, data mining), and any analytical approach that will be used (e.g., A/B analysis, benefit-cost analysis, statical regression, trend analysis). Additional data, tools, and methods to be determined, working with stakeholders.

Anticipated challenges and proposed solutions: Anticipated challenges include the availability of relevant and reliable data, as well as the ability of key partners such as EPA regions, EPA, states, Tribes, and territories to undertake activities that generate new data. To help overcome this challenge, OECA has partnered with the E-Enterprise Leadership Council (EELC) and have invited the Environmental Council of States (ECOS), and the National Tribal Council (NTC) to participate in the workgroup to draft the learning agenda.

Dissemination of findings: OECA anticipates making project(s) findings public including with states and Tribes through the EELC and other partnerships. Information and any findings also will be shared with appropriate EPA staff and management.

Office of Land and Emergency Management

Title	OLEM Population Analysis			
Lead National Program	Office of Land and Emergency Management			
Strategic Goal,	Goal 6: Safeguard and Revitalize Communities			
Objective, and/or	Objective 6.1: Cleanup Up and Restore Land for Productive Uses			
Cross-Agency Strategy	and Healthy Communities			
Planned start date	January 2023	Planned completion date	May 2023	

Purpose and description: This is a descriptive study. The purpose is to conduct a bi-annual analysis to support evidence-based descriptions of who benefits from EPA's cleanup and prevention work, by collecting data on the population living within three and one mile(s) of a Superfund site, Brownfields site, Resource Conservation and Recovery Act (RCRA) Corrective Action (CA) site, Leaking Underground Storage Tank (LUST) site, and Underground Storage Tank (UST) facility that exist in thousands of communities across the United States ranging from remote to large urban settings. This analysis also supports EPA's *America's Children and the Environment Report*, by estimating the number of children and their socioeconomic/demographic characteristics who live within one mile of a RCRA CA or Superfund site that may not have had all human health protective measures in place at the time of the analysis.

Programmatic or policy decisions this activity will inform: Populations that are more minority, low income, linguistically isolated, or less likely to have a high school education than the U.S. population as a whole, may have fewer resources with which to address concerns about their health and environment. EPA includes these factors in population analyses to understand the potential for these vulnerabilities in relation to cleanup sites at the national level. Results are included in EPA's annual budget reviews with OMB, and in budget justifications for Congress. Results also are used in general communications with press, other government agencies, and the public.

Question(s) this activity will address: What are the estimates for the population living within three and one mile(s) of a Superfund site, Brownfield site, RCRA CA site, LUST site and UST facility by Race, Ethnicity, Minority, Income, Education; Age; Linguistic isolation?⁷³²

Data, tools, method/analytical approach: OLEM will use site location and status data from the Assessment, Cleanup and Redevelopment Exchange System (ACRES), Superfund Enterprise Management System (SEMS) and RCRA Info for Brownfields, Superfund and RCRA CA, respectively. Site location and status data for LUST sites and UST facilities from ORD's state LUST/UST database. Population data from the most recent American Community Survey 5-Year Estimates. Latitude and longitude coordinates are used to map site locations. Then 1- and 3- mile buffers are drawn from the site location. Depending on data availability, the site location is either a point, a modeled circular site boundary based on site acreage around a point or the actual site boundaries. Using census block group centroids and the 1- and 3- mile buffers, the population and

⁷³² Race - people who self-identify as white, black, Asian, Native American, Hawaiian/pacific islander, or other; Ethnicity - people of all races who self-identify as hispanic or non-hispanic; Minority - all race and ethnicity combinations except "non-hispanic whites"; Income - below poverty level, and incomes twice or more above poverty level; Education - less than high school education; Age- Under 5, Under 18, over 64; Linguistic isolation: households where all members do not speak English as a first language or "very well."

characteristics are estimated. If the census block centroid falls within the buffer, then the population of that census block is included in the estimation of the near site population. OLEM compares the near site populations to the overall U.S. population to identify differences in the characteristics listed above. OLEM follows the methods used in the America's Children and the Environment Report Indicators E10 and E11. For more details on the methods, see the Summary of Methods. This spatial analysis is done using ArcGIS and R software suites.

Anticipated challenges and proposed solutions: Geospatial data available to map site boundaries is limited. EPA continues to work to improve geospatial data on Superfund and RCRA Corrective Action site boundaries. The LUST/UST data used was obtained from the <u>USTFinder</u>. The USTFinder is a new web map application containing a comprehensive, state-sourced national map of underground storage tank (UST) and leaking UST (LUST) data. USTFinder was made possible by a large ORD data collection effort. Ability to update estimates for LUST/UST in the future depends on whether ORD updates data in the USTFinder.

Dissemination of findings: EPA will share the results of these analyses on EPA's website and include the information in Agency documents that are available to the public. Information and any findings also will be shared with appropriate EPA staff and management.

Title	Redevelopment Economics at Remedial Sites (non-federal facility)				
Lead National Program	Office of Land and Emergency Management				
Strategic Goal,	Goal 6: Safeguard and Revitalize Communities				
Objective, and/or	Objective 6.1: Cleanup Up and Restore Land for Productive Uses				
Cross-Agency Strategy	and Healthy Communities				
Planned start date	October 2022	Planned completion date	January 2023		

Purpose and description: Cleaning up contaminated sites can serve as a catalyst for economic growth and community revitalization. The Superfund Remedial Program facilitates the redevelopment of sites across the country while protecting human health and the environment. Collaborative efforts among state, local, and tribal partners, redevelopers and other federal agency programs encourage restoration of sites. Since Superfund sites often encompass buildings, roads, and other infrastructure, their effective and efficient cleanup and reuse can play a pivotal role in a community's economic growth. EPA has initiated efforts to collect economic data at a subset of Superfund sites.

Programmatic or policy decisions this activity will inform: Economic data are included in budget justifications to Congress and are used in general communication with key stakeholders and the public.

Question(s) this activity will address: The analysis will provide current, reliable business-related information for a subset of Superfund sites in reuse and continued use. Some innovative business owners and organizations reuse Superfund sites for a variety of purposes. These uses can help economically revitalize communities near Superfund sites.

Data, tools, method/analytical approach: The study estimates economic activity at Superfund sites in reuse from reputable sources based on methodology developed by EPA's Superfund

Redevelopment Initiative and outlined on the <u>public webpage</u>. Information on the number of employees and sales volume for on-site businesses typically comes from Hoovers/Dun & Bradstreet, the ReferenceUSA and Manta databases.

Anticipated challenges and proposed solutions: There are no anticipated challenges.

Dissemination of findings: The summary of the results will be shared on <u>EPA's website</u>. Information and any findings also will be shared with appropriate EPA staff and management.

Title	Redevelopment Economics at Federal Facilities			
Lead National Program	Office of Land and Emergency Management			
Strategic Goal,	Goal 6: Safeguard and Revitalize Communities			
Objective, and/or	Objective 6.1: Cleanup Up and Restore Land for Productive Uses			
Cross-Agency Strategy	and Healthy Communities			
Planned start date	October 2022	Planned completion date	January 2023	

Purpose and description: Cleaning up contaminated sites at federal facilities can serve as a catalyst for economic growth and community revitalization. The Superfund Federal Facilities Program facilitates the redevelopment of federal facility sites across the country by assisting other federal agencies (OFAs) expedite activities related to CERCLA response actions, while protecting human health and the environment. Collaborative efforts among OFAs; developers; and state, local, and tribal partners encourage restoration of sites. Since federal facility Superfund sites often encompass thousands of acres with buildings, roads, and other infrastructure, their effective and efficient cleanup and reuse can play a pivotal role in a community's economic growth. EPA has initiated efforts to collect economic data at a subset of federal facility Superfund sites that is outlined on the public webpage Redevelopment Economics at Federal Facilities.

Programmatic or policy decisions this activity will inform: Economic data are included in budget justifications to Congress and are used in general communication with other Federal agencies and the public.

Question(s) this activity will address: The analysis will provide current, reliable business-related information for a subset of federal facility Superfund sites in reuse and continued use. Some innovative business owners and organizations reuse Superfund sites for a variety of purposes. These uses can help economically revitalize communities near Superfund sites.

Data, tools, method/analytical approach: The study estimates economic activity at federal facilities Superfund sites in reuse from reputable sources based on methodology developed by EPA's Superfund Redevelopment Initiative, which is outlined in more detail at <u>Redevelopment Economics at Federal Facilities</u>. Information on the number of employees and sales volume for on-site businesses typically comes from Hoovers/Dun & Bradstreet, the ReferenceUSA and Manta databases.

Anticipated challenges and proposed solutions: There are no anticipated challenges.

Dissemination of findings: The summary of the results will be shared on <u>EPA's website</u>. Information and any findings also will be shared with appropriate EPA staff and management.

Office of Mission Support

Title	Diversity, Equity, Inclusivity, Accessibility Plan Implementation					
Lead National Program	Office of Mission Support					
Strategic Goal,	Cross-Agency Strategy 3: Advance EPA's Organizational					
Objective, and/or Cross-	Excellence					
Agency Strategy	and Workforce Equity					
Planned start date	October 2021 Planned completion date September 2026					

Purpose and description: In line with President Biden's Executive Order on Diversity, Equity, Inclusion, and Accessibility in the Federal Workforce, EPA will implement the actions identified in the draft Diversity, Equity, Inclusion, and Accessibility (DEIA) Plan.

Programmatic or policy decisions this activity will inform: EPA will take an evidence-based and data-driven approach to determine whether and to what extent agency practices result in inequitable employment outcomes, and whether agency actions may help to overcome systemic societal and organizational barriers. For areas where evidence is lacking, the Agency will propose opportunities advance diversity, equity, inclusion, and accessibility, addressing those gaps.

Question(s) this activity will address:

- Are Agency recruitment, hiring, promotion, retention, professional development, performance evaluations, pay and compensation policies, reasonable accommodations access, and training policies and practices equitable?
- What is the status and effects of existing diversity, equity, inclusion, and accessibility initiatives or programs?
- What are the number and nature of institutional resources available to support human resources activities?

Data, tools, method/analytical approach: Tools will include the various HR dashboards and systems that contain demographics data that can be used to assess diversity within the Agency. Methods and approaches will be determined following finalization of the DEIA plan.

Anticipated challenges and proposed solutions: There are no anticipated challenges.

Dissemination of findings: Results of findings will be shared with the Agency as new workforce policies, procedures, trainings that will be used to foster a diverse, equitable, inclusive, and accessible workforce. Information and any findings also will be shared with appropriate EPA staff and management.

Title	Facility Climate Resiliency Assessments				
Lead National Program	Office of Mission Support				
Strategic Goal,	Goal 1: Tackle the Climate Crisis				
Objective, and/or Cross-	Objective 1.2: Accelerate Resilience and Adaptation to Climate				
Agency Strategy	Change Impacts				
Planned start date	October 2021	Planned completion date	September 2024		

Purpose and description: Climate resiliency has been an integral component of EPA's site planning and facility support for more than a decade. In preparation for severe weather effects on its buildings, infrastructure, operations, and mission-critical activities, EPA's Office of Mission Support (OMS) has conducted climate resiliency assessments at several key facilities in coastal, plains, and mountain regions to identify vulnerabilities and opportunities for climate readiness and adaptation. EPA may conduct additional facility climate resiliency assessments to identify new vulnerabilities and determine best practices for withstanding severe weather events, enhancing IT security, ensuring resilient power supplies, and continuing EPA's mission-related work in the event its buildings or operations are compromised by climate change.

Programmatic or policy decisions this activity will inform: Following completion of a climate assessment at a facility, EPA will prioritize the identified projects based on several factors, including impact on overall facility resiliency, cost, ability to execute, and initiate the highest priority projects.

Question(s) this activity will address: The results of the climate assessments will provide EPA with data on actions/projects the Agency can take to improve the physical and operational resiliency of its facilities against the impacts of climate change.

Data, tools, method/analytical approach: Climate assessments will examine physical and operational vulnerabilities of facilities, assessments may address the following areas: Water Quality and Supply; Severe Weather and/or Flooding Damage; Field Worker Safety; Physical Security; and Security Operations and Emergency Communications. To meet the directives in Executive Order 14008 – Tackling the Climate Crisis at Home and Abroad, EPA is currently developing a Climate Adaptation Plan; final plans and approaches for facility climate assessments will be included.

Anticipated challenges and proposed solutions: The primary challenge associated with this activity is financial as the costs associated with pursuing climate resiliency enhancements to EPA-owned facilities may exceed annual appropriations in the Buildings & Facilities account. EPA will prioritize the facility projects to ensure that the highest priority projects with the greatest impacts on resiliency are initiated within available resources.

Dissemination of findings: EPA will not make generally available the results of every facility climate assessment; however, EPA publishes a list of the major Buildings & Facilities projects it intends to pursue with the annual Congressional Justification budget narrative and these projects may include major climate resiliency projects. Information and any findings also will be shared with appropriate EPA staff and management.

Title	Implementing Multifactor Authentication and Encryption					
Lead National Program	Office of Mission Support					
Strategic Goal,	Cross-Agency Strategy 3: Advance EPA's Organizational					
Objective, and/or Cross-	Excellence					
Agency Strategy	and Workforce Equity					
Planned start date	October 2021 Planned completion date September 2026			tember 2026		

Purpose and description: Executive Order 14028 – *Improving the Nation's Cybersecurity* mandates that Agencies implement a Zero Trust Architecture in accordance with the National Institute of Standards and Technology (NIST) standards and guidance and implement Multifactor Authentication (MFA) and encryption for Data at Rest and Data in Transit for Federal Information Systems Modernization Act (FISMA) Systems. EPA currently has 127 systems, of which 40% are believed to meet the NIST requirements for multifactor authentication. The Agency has identified the implementation of MFA as a Long-Term Performance Goal for the *FY 2022-2026 EPA Strategic Plan*. This effort will require collecting information regarding MFA for all 127 FISMA into the Agency's Governance Risk and Compliance (GRC) Information Security management system, XACTA, in a standardized manner.

Programmatic or policy decisions this activity will inform: This data will identify the FISMA systems across the Agency that will require implementation of MFA and enable the Office of Mission Support to target compliance to those offices within the FISMA system boundaries.

Question(s) this activity will address:

- What FISMA systems currently have implemented MFA?
- What FISMA systems that do not currently have MFA, require MFA to be implemented?

Data, tools, method/analytical approach: FISMA System owners will update this data, in a standardized format to allow the Office of Mission Support to track compliance with MFA implementation requirements. Agency tools (e.g., Beyond Trust, CyberArk, hosting utilities, others) can potentially be configured to monitor the use of Multifactor Authentication to access the FISMA Systems and the adoption of Encryption for DAR and DIT. (OISP can work with System Owners and OITO tool managers to configure tools and generate reports). Annual Assessments performed by third party auditors shall address the multifactor authentication and encryption security controls and will reflect updates in the final report. (Report provided by third-party assessor to system owners). Updated Quarterly FISMA reporting shall address the modifications to the "System Boundaries" to address the enforcement. (System, owners will report status to ISSS, and OISP for an official response).

Anticipated challenges and proposed solutions: No anticipated challenges foreseen at this time.

Dissemination of findings: This is privileged information pertaining to EPA system security and will not be made available to the public. Information and any findings also will be shared with appropriate EPA staff and management.

Office of Research and Development

Title	Climate Change	Climate Change Research					
Lead National Program	Office of Resea	Office of Research and Development					
Strategic Goal,	Goal 1: Tackle	Goal 1: Tackle the Climate Crisis					
Objective, and/or Cross-	Objective 1.2:	Accelerate Resilience and A	Adaptation to Climate				
Agency Strategy	Change Impacts	Change Impacts					
Planned start date	October 2023 Planned completion date September 2026						

Purpose and description: Climate change is impacting public health, air and water quality today and will exacerbate environmental challenges in the future. Potential effects from climate change include increases in scale and frequency of hurricanes, wildland fires, flooding and drought, and changes in transportation and energy usage. EPA/ORD is coordinating research across the six National Research Programs (NRP) to: research causes and mitigating factors for climate change; developing knowledge to support science-based decision making; and supporting emergency response, disaster preparation and recovery, as well as supporting communities and ecosystems against severe weather within a sustainable management framework.

Programmatic or policy decisions this activity will inform: In support of climate change research and Environmental Justice (EJ), ORD research efforts will strengthen science as a foundation for addressing environmental and human health challenges within underserved or atrisk communities.

Question(s) this activity will address: EPA and stakeholders require tools and data that accurately forecast how air quality, water quality, ecosystems, and human health will be affected as a consequence of a changing climate and the potential mitigation strategies that are adopted. ORD research will inform decisions and efforts to decrease the disproportionate impacts of climate change.

Some climate induced disasters will cause EPA, states, and tribal governments to provide support activities including public drinking water supply, drinking and wastewater infrastructure recovery, debris management, and environmental contamination cleanup (oil spill, pesticide, hazardous waste, mold, etc.). Likewise, many of these response activities benefit from capabilities developed from Homeland Security research supporting chemical, biological, and radiological incident response.

Data, tools, method/analytical approach: This research area will produce a large amount of data, methods, and tools to advance the government and stakeholders' understanding of adverse and multi-faceted effects associated with a changing climate. Similarly, the research will produce methods and tools to improve community preparation, response, and recovery for climate induced disasters, as well as to improve the long-term resilience of communities to climatic change with respect to human health and the environment.

Anticipated challenges and proposed solutions: This research area will produce a large volume of scientific deliverables which will require complex research planning, facilitation, review coordination, task prioritization, and regular interactions with programmatic partners (e.g., OAR,

OW, OLEM, Regional Offices) to ensure deliverables/products address stakeholder requirements. To support these efforts, EPA/ORD will continue development of more efficient methods of project implementation and tracking.

Dissemination of findings: EPA will make research findings publicly available through several forms such as technical reports, journal publications, open-access web-based tools and models, data sets, webinars, and technical fact sheets. Information and any findings also will be shared with appropriate EPA staff and management.

Title	Environmental Justice and Vulnerable Populations					
Lead National Program	Office of Research and Development					
Strategic Goal,	Goal 2 Take Decisive Action to Advance Environmental Justice and					
Objective, and/or Cross-	Civil Rights					
Agency Strategy	Objective 2.1: Promote Environmental Justice Efforts at the					
	Federal, Tribal, State, and Local Levels					
Planned start date	September 2023 Planned completion date September 2026					

Purpose and description: EJ is an integral part of EPA's mission to protect human health and the environment. EJ is achieved when all people are fully protected from environmental and health hazards and have equitable access to decision-making processes to maintain a healthy environment in which to live, learn, play, and work. Low-income, disadvantaged communities and indigenous peoples are often disproportionately vulnerable to environmental health challenges due to greater risk of exposure to many sources of pollutants or contaminants (chemical stressors). EJ communities are often disadvantaged due to long term environmental policies that resulted in wealth and/or health inequities or disparities, and they are increasingly at-risk to the effects of climate change and extreme weather. Similarly, health impacts from these chemical and nonchemical stressors vary with lifestages, as well as inherent sensitivities. Children, older persons, and people with disabilities or pre-existing health conditions are particularly vulnerable to the effects of climate changes and associated environmental stressors. In coordination with the six National Research Programs (NRP), EPA will lead research on identifying how health disparities can arise from unequal environmental conditions, including impacts from climate change and exposures to pollution, and inequitable social and economic conditions.

Programmatic or policy decisions this activity will inform: In support of climate change research and EJ, ORD research efforts will strengthen science as a foundation for addressing environmental and human health challenges within underserved or at-risk communities.

Question(s) this activity will address: ORD's research will:

- Expand scientific understanding of environmental health disparities and the shortening of human lifespan related to exposure to chemical and nonchemical stressors in vulnerable populations and life stages
- Investigate the intertwined social and environmental variables effecting community resilience and vulnerability to environmental hazards
- Characterize and assess exposures, risks, and impacts associated with air pollution and climate change, while identifying and incorporating evidence-based solutions to reduce these adverse effects in EJ communities

Data, tools, method/analytical approach: A large amount of data, methods, and tools will be developed to support decision-making and empower disadvantaged communities to improve resilience and sustainability. Similarly, this research will enhance human health by supporting the development of new technologies, data, models, and tools as well as resources and trainings for risk communication and risk management, outreach, and community engagement.

Anticipated challenges and proposed solutions: This research area will produce a large volume of scientific deliverables which will require complex research planning, facilitation, review coordination, task prioritization, and regular interactions with programmatic partners (e.g., OAR, OW, OLEM, Regional Offices) to ensure deliverables/products address stakeholder requirements. To support these efforts, EPA/ORD will continue development of more efficient methods of project implementation and tracking.

Dissemination of findings: EPA will make research findings publicly available through several forms, such as technical reports, journal publications, open-access web-based tools and models, data sets, webinars, and technical fact sheets. Information and any findings also will be shared with appropriate EPA staff and management.

Office of Water

Title	Clean Water Infra	Clean Water Infrastructure Revolving Fund State Reviews					
Lead National Program	Office of Water	Office of Water					
Strategic Goal, Objective, and/or Cross- Agency Strategy		Goal 5: Ensure Clean and Safe Water for All Communities. Objective 5.1: Ensure Safe Drinking Water and Reliable Water Infrastructure					
Planned start date	October 2022 Planned completion date September						

Purpose and description: EPA completes annual reviews of each State Clean Water Revolving Fund Program (CWSRF).

Programmatic or policy decisions this activity will inform: These reviews will help assess if states are effectively implementing the Clean Water Revolving Fund Categorical Grant Program by increasing the amount of non-federal dollars leveraged. The reviews also will be used to encourage states to direct funding to projects that address climate resiliency and equity.

Question(s) this activity will address:

- Are states effectively implementing the Clean Water Revolving Fund Categorical Grant Program by leveraging non-federal funds?
- Are the states complying with the EPA's State and Tribal Assistance Grant Program requirements?
- What steps are the states taking to promote climate resiliency and equity through CWSRF funding?

Data, tools, method/analytical approach: Data are provided from each state CWSRF Program review that are conducted by EPA Headquarters and the Regions.

Anticipated challenges and proposed solutions: There are no anticipated challenges.

Dissemination of findings: The findings from the annual state reviews are documented in Program Evaluation Reports, which are provided to EPA Headquarters by the regional offices. EPA Headquarters periodically updates guidance based on these findings. Revised guidance is made available to states and stakeholders through EPA's website. Information and any findings also will be shared with appropriate EPA staff and management.

Title	Safe Drinking	Water Information Syste	m (SDWIS) National						
	Community Wa	Community Water System Non-Compliance Review							
Lead National Program	Office of Water	Office of Water							
Strategic Goal,	Goal 5: Ensure	Goal 5: Ensure Clean and Safe Water for All Communities.							
Objective, and/or Cross-	Objective 5.1:	Ensure Safe Drinking Wat	er and Reliable Water						
Agency Strategy	Infrastructure.								
Planned start date	October 2022 Planned completion date September								

Purpose and description: EPA conducts a review quarterly of the Safe Drinking Water Information System (SDWIS) National Community Water System (CWS) health-based noncompliance data.

Programmatic or policy decisions this activity will inform: This review assesses the trends and causes of non-compliance to information technical, managerial, and financial state and public water system capacity building training or future drinking water regulation needs, in support of regulatory drinking water compliance.

Question(s) this activity will address:

What are the barriers and challenges of CWS systems maintaining compliance with health-based drinking water standards?

Data, tools, method/analytical approach: Data are provided from EPA's SDWIS database. There is a non-compliance review of CWS systems with health-based violations by regulation type, geographical distribution and system source type.

Anticipated challenges and proposed solutions: There are no anticipated challenges.

Dissemination of findings: The findings from the Program reviews will be publicly shared. Quarterly data reports are shared publicly via the <u>SDWIS FED Data Warehouse</u>. Information and any findings also will be shared with appropriate EPA staff and management.

Title	Public Water Sy	Public Water System Supervision (PWSS) Program Reviews &					
	Drinking Water In	Drinking Water Infrastructure Revolving Fund State Reviews					
Lead National Program	Office of Water	Office of Water					
Strategic Goal,	Goal 5: Ensure Cl	Goal 5: Ensure Clean and Safe Water for All Communities.					
Objective, and/or Cross-	Objective 5.1: En	nsure Safe Drinking Water	and Reliable Water				
Agency Strategy	Infrastructure.						
Planned start date	October 2022	September 2023					

Purpose and description: EPA annually conducts reviews of agencies with Public Water System Supervision (PWSS) primacy (55 reviews) and reviews of each State Drinking Water Revolving Fund Program.

Programmatic or policy decisions this activity will inform: These reviews assess if primacy entities are effectively implementing the PWSS Program to oversee community water system compliance with the Safe Drinking Water Act and assess if states are effectively implementing the Drinking Water Revolving Fund Categorical Grant Program to facilitate community water system compliance with the Safe Drinking Water Act (SDWA).

Question(s) this activity will address:

- Are primacy entities effectively implementing the range of activities in the PWSS Program to oversee community water system compliance with the Safe Drinking Water Act?
- Are states effectively implementing the Drinking Water Revolving Fund Categorical Grant Program to facilitate community water system compliance with the Safe Drinking Water Act and complying with the EPA's State and Tribal Assistance Grant Program requirements?

Data, tools, method/analytical approach: Data is provided via program review reports by agencies with primacy for the PWSS Program. The reports include elements such as state use of the funds and the associated effects, compliance, and implementation of SDWA regulations, alignment of program with national enforcement and compliance priorities, and public communication efforts. For DWSRF data is provided from each state DWSRF program review conducted by EPA Headquarters and the Regions.

Anticipated challenges and proposed solutions: There are no anticipated challenges.

Dissemination of findings: EPA's regional offices engage and share results with primacy agencies under their purview. EPA shares PWSS information on water system compliance rates across and within states. EPA makes publicly available an annual report on the status of the national DWSRF Program. EPA also shares project and financial data at the national and state level. Please see the most recent annual report, 2019 DWSRF annual report, for additional information. Information and any findings also will be shared with appropriate EPA staff and management.

Environmental Protection Agency 2023 Annual Performance Plan and Congressional Justification

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FY 2021 Annual Performance Report

Introduction

EPA's FY 2021 Annual Performance Report (APR) describes the fourth year of progress toward the strategic goals and objectives in the FY 2018-2022 EPA Strategic Plan, available at https://www.epa.gov/planandbudget/fy-2018-2022-epa-strategic-plan. This APR presents results against the annual performance goals and targets in the Agency's FY 2021 Annual Performance Plan (APP) and Congressional Justification (CJ) as updated in the FY 2022 APP and CJ. Please also refer to EPA's FY 2021 Agency Financial Report (AFR), available at https://www.epa.gov/planandbudget/results, for information on financial performance results.

Organization of the FY 2021 APR

EPA's FY 2021 performance results and trend data are integrated throughout the FY 2023 APP and the CJ in the Budget Introduction, Goal Overviews, and Program Project Fact Sheets. The Program Performance and Assessment section (Tab 16) is the primary component of EPA's FY 2021 APR. EPA's FY 2021 performance results and trend data are organized by strategic goal and objective. This section includes Goal-at-a-Glance Overviews and detailed multiyear tables with targets, results, graphs, and key takeaways for the Agency's strategic objectives and annual performance goals. This section adopts the terminology and color coding used to measure progress under the EPA Continuous Improvement System, a set of practices and tools that supports Agency employees in identifying and solving problems for optimal performance results.

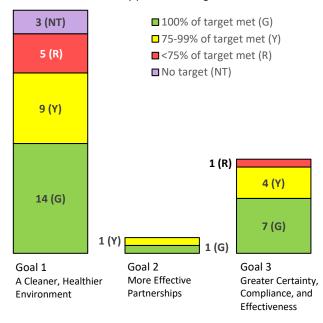
FY 2021 Performance Data

FY 2021 Annual Performance Goal Results

For FY 2021, EPA focused on a set of 45 annual performance goals, including annualized longterm performance goals to achieve ambitious targets set in the FY 2018-2022 EPA Strategic Plan and measures representing key work areas that support those long-term performance goals. EPA met or exceeded 52% of the targets in their entirety for annual performance goals with FY 2021 targets and data available (22 of 42). For 14 of its annual performance goals with FY 2021 targets and data available (33%), the Agency achieved between 75-99% of the target (including three where the Agency achieved between 90-99% of the target). For six of its annual performance goals with FY 2021 targets and data available (15%), EPA achieved less than 75% of the target.

Performance toward target by goal

Number of measures by percent of target achieved



While EPA is making significant progress toward a broad range of outcomes, the Agency missed targets for 20 (of 42) annual performance goals that had FY 2021 targets and data available. Reasons for missed targets include the complexity of the environmental challenge, increased workload demands due to COVID-19 response, and other factors outside of the Agency's control (such as COVID-19 space construction delays). In some areas with missed targets, the Agency nevertheless made significant improvements in its performance over recent years. 733 EPA will continue to make progress toward its performance targets by applying Lean management principles to improve the efficiency and cost effectiveness of its operations. More detail is available throughout the report.

No FY 2021 results are available for two of the Agency's annual performance goals as of April 2022—one because it had no data to track in FY 2021⁷³⁴ and the other because it has a reporting lag due to the grant reporting cycle. ⁷³⁵ FY 2021 results are reported for one of the Agency's annual performance goals for which no target was established. ⁷³⁶

Verification/Validation of Performance Data

⁷³³ For example, (PM TMDL-02) Percentage of priority TMDLs, alternative restoration plans, and protection approaches in place and (PM FO1) Percentage reduction in overdue FOIA requests from the April 2018 baseline.

⁷³⁴ PM TSCA1: Number of final EPA-initiated TSCA risk evaluations completed within statutory timelines.

⁷³⁵ PM P2mtc: Reductions in million metric tons of carbon dioxide equivalent (MMTCO2e) released per year attributed to EPA pollution prevention grants.

⁷³⁶ PM UST01: Number of confirmed releases at UST facilities.

The Agency developed Data Quality Records (DQRs) for the long-term performance goals in the FY 2018-2022 EPA Strategic Plan. FY 2021 DQRs are available at https://www.epa.gov/planandbudget/results. EPA maintains the DQRs to ensure consistency and quality of data used for assessing and reporting progress towards annual performance goals. The DQRs describe the results being measured; data sources and limitations; methods for calculating results; and controls to ensure good data quality.

FY 2020-2021 Agency Priority Goals

EPA exceeded targets for two of the four FY 2020-2021 Agency Priority Goals (APGs) (redesignation of areas to air quality attainment, water infrastructure) and missed targets for two of the four APGs (site cleanups, permitting decisions). EPA ceased collecting FY 2021 results for the childhood lead and per- and polyfluoroalkyl substances (PFAS) APGs as projects and plans have evolved to align with new Administration priorities.

• Improve air quality by reducing the number of areas not meeting air quality standards. By September 30, 2021, EPA, in close collaboration with states, will reduce the number of nonattainment areas to 121 from a baseline of 147.

Exceeded FY 2020-2021 target. Since FY 2020, EPA has worked with state, local and tribal air agencies to facilitate submittal of timely and approvable attainment plans (as a means of bringing areas into attainment) and redesignation requests, as appropriate. Through this collaboration with state, local and tribal air agencies, EPA took actions to improve air quality in nonattainment areas so these areas can expeditiously attain the National Ambient Air Quality Standards (NAAQS). In FY 2020 and FY 2021, EPA took final action on state requests to redesignate 27 nonattainment areas to attainment, reducing the number of nonattainment areas to 120 from the October 2019 baseline of 147 areas, exceeding the target of 121.

• Empower communities to leverage EPA water infrastructure investments. By September 30, 2021, EPA will increase by \$16 billion the non-federal dollars leveraged by the EPA water infrastructure finance programs (Clean Water State Revolving Fund [CWSRF], Drinking Water State Revolving Fund [DWSRF], and the Water Infrastructure Finance and Innovation Act [WIFIA] Program).

Exceeded FY 2020-2021 target. Over the two-year time period, the Clean Water State Revolving Fund (CWSRF), Drinking Water State Revolving Fund (DWSRF), and Water Infrastructure Finance and Innovation Act (WIFIA) Programs leveraged more than \$22.3 billion of non-federal dollars, increasing the funds available to improve, repair, and modernize the nation's water infrastructure. This exceeded the \$16 billion goal and demonstrates the powerful opportunity to leverage non-federal dollars. In addition, EPA met targets for all of the contributing indicators: Engagements with the Water Infrastructure Community; Tools, Training, and Resources Provided to the Water Infrastructure Community; and State Revolving Fund (SRF) State Reviews completed. The Agency's success is due to the collaborative efforts of EPA, states, and local communities.

• Accelerate the pace of cleanups and return sites to beneficial use in their communities. By September 30, 2021, EPA will make an additional 102 Superfund (SF) sites and 1,368 brownfields (BF) sites ready for anticipated use (RAU).

Missed FY 2020-2021 target. EPA made 60 Superfund sites and 1,425 brownfield sites RAU in FY 2020-2021, missing the Superfund target of 102 and exceeding the brownfields target of 1,368. For Superfund, fewer than 102 sites could reasonably achieve sitewide RAU in FY 2020 and FY 2021 combined, and many of those faced significant challenges including: coordination with external entities not leading to desired progress on internal controls (e.g., controls not enforceable by local authorities, controls not aligned with state requirements; absent, deceased, or uncooperative landowners; lawsuits restricting access for site work or delaying institutional controls; changing land uses which can result in the need for additional controls; and the discovery of potential new exposure pathways or emerging contaminants). For brownfields, EPA completed conversations with EPA regions, states, and tribes on their varying practices for classifying a site RAU to ensure greater consistency.

• Accelerate permitting-related decisions. By September 30, 2021, EPA will reduce the backlog of new permitting-related decisions to 24 from a baseline of 65; and reduce the backlog of permit renewals by 38% from a baseline of 417.

Missed FY 2020-2021 target. EPA increased the backlog of new permit applications to 67 and reduced the backlog of permit renewals to 318, missing the targets of 24 and 256, respectively. EPA faced a number of challenges, including delayed information from permittees, complicated sites, emerging contaminants, large volume of public comments, loss of experienced personnel, and environmental reviews from other federal agencies. In addition, the six-month timeframe is challenging for certain types of complex permits. EPA worked to streamline processes and resolve policy issues to sustain progress made in previous years and prevent future permits from becoming backlogged. The new permit backlog is down 65% since June 2018, and the existing permit backlog is down 34% since May 2019.

Evidence and Evaluation

Summaries of FY 2021 contributions to EPA's portfolio of evidence are available at https://www.epa.gov/planandbudget/results. EPA uses program evaluations and other evidence to assess effectiveness of programs in meeting Agency goals, to identify ways to improve mission delivery, and to strengthen use of evidence in decision making. This is particularly important for fostering transparency and accountability.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

THE ADMINISTRATOR

Reliability of EPA's Performance Data

I attest to the reliability and completeness of the performance data presented in the U.S. Environmental Protection Agency's Fiscal Year 2021 Annual Performance Report. Because improvements in human health and the environment may not become immediately apparent, there might be delays between the actions we have taken and results we can measure. Additionally, we cannot provide results data for two of our performance measures for this reporting year – the first because it had no data to track in FY 2021 and the second because it has a reporting lag due to the grant reporting cycle. When possible, however, we have portrayed trend data to illustrate progress over time.

Michael S. Regan

MAR 1 7 2022

Date

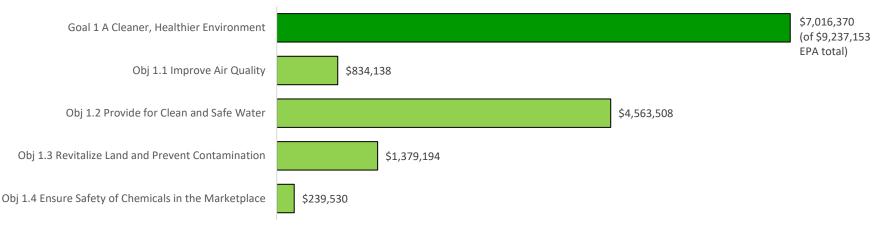
Targets by **Key to Multiyear Table Annual Performance Goal Data Presentation** Fiscal Year (PM #) Annual performance goal language here. Preferred FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 Units **Direction** No Target **Target** 13 13 12 Established Sites Increase 12 11 13 10 9 Actual Green = Yellow = 75-Purple = Red =Gray = NoActuals by No 100% of 99% of Target <75% of Fiscal Vaar Annual White (past year) = NoAnnual Performance Goal

GOAL 1: A Cleaner, Healthier Environment

Goal 1 at a Glance

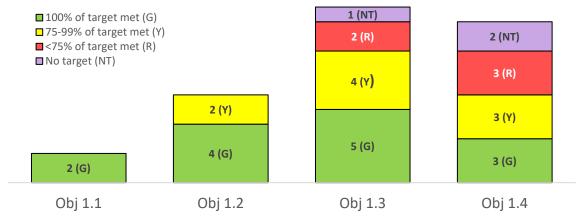
A Cleaner, Healthier Environment: Deliver a cleaner, safer, and healthier environment for all Americans and future generations by carrying out the Agency's core mission.





FY 2021 Performance toward target by objective

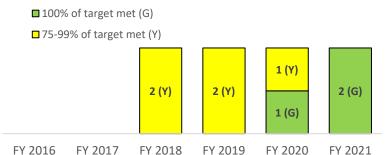
Number of measures by percent of target achieved



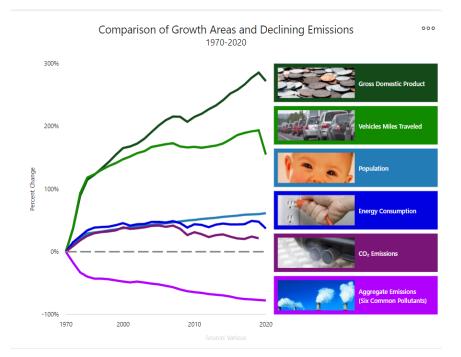
Objective 1.1 – Improve Air Quality: Work with states and tribes to accurately measure air quality and ensure that more Americans are living and working in areas that meet high air quality standards.

Performance toward target over time

Number of measures by percent of target achieved



Counts are of measures that exist in FY 2021. Chart does not include measures that previously existed but were eliminated prior to FY 2021.



Summary of progress toward strategic objective:

- Redesignated 5 areas to attainment for various National Ambient Air Quality Standards (NAAQS). Exceeded the FY 2020-2021 Agency Priority Goal target.
- Worked with states to reduce the historic State Implementation Plan (SIP) backlog that existed as of October 2013 by over 95% (from 699 SIPs to 32 SIPs as of September 30, 2021) and provided states with the "State implementation Plan (SIP) Lean Toolkit for Collaboration Between EPA and Air Agencies" to support timely action on SIPs through early engagement. In FY 2021, EPA received 309 new SIPs, took action on 361 SIPs and reduced the current SIP backlog from 341 to 312.
- Published Air Trends Report which shows between 1970 and 2020, the combined emissions of six common pollutants (PM2.5 and PM10, SO2, NOx, VOCs, CO and Pb) dropped by 78%. This progress occurred while U.S. economic indicators remained strong.
- Released the 28th annual Inventory of U.S. Greenhouse Gas (GHG) Emissions, showing net U.S. GHG emissions were 5,769 million metric tons of CO2 equivalent in 2019, a 1.7% decrease in emissions between 2018 and 2019.
- Verified 99% of annual GHG emission reports before publication deadline as part of the Greenhouse Gas Reporting Program.
- Issued 5,351 certificates of conformity for engines, vehicles, and complementary pieces of equipment allowing manufacturers to enter products into commerce in the U.S.
- Released the annual Automotive Trends Report finding that all large car manufacturers were in compliance with the light-duty GHG program through Model Year 2020.
- Released annual data on 2020 emissions NOx, SO2, CO2, and Mercury (Hg) from power plants in the lower 48 states, showing a 19% decline in SO2 emissions compared to 2019, a 16% decline in NOx emissions, an 11% decline in CO2 emissions, and a 17% decrease in Hg emissions.
- In 2019 (latest data), ENERGY STAR and its partners helped Americans save nearly 500 billion kilowatt-hours of electricity and avoid \$39 billion in energy costs. These savings resulted in emissions reductions of nearly 390 million metric tons of GHGs, roughly equivalent to 5% of U.S. total GHG emissions.
- Oil and natural gas companies that participated in EPA's Methane Challenge Program reduced methane emissions equivalent to over 7 million metric tons of CO2 through voluntary action from 2016 through 2019.

Challenges:

• While EPA is making steady and expected progress redesignating areas to NAAQS attainment, under the Clean Air Act (CAA), states are responsible for initiating the redesignation process, a process that demands time and resources from states.

Long-Term Performance Goal - By September 30, 2022, reduce the number of nonattainment areas to 101⁷³⁷.

Annual performance goals that support this long-term performance goal:

(PM NA1) Number of Nonattainment Areas.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	7
Target			155	138	132	121	Nonattainme	Dalaxy Target	
Actual	176	166	159	147	125	120	nt Areas	Below Target	

Key Takeaways:

- In FY 2021, EPA took final action on state requests to redesignate five nonattainment areas to attainment.
- EPA exceeded its FY 2021 target and FY 2020-2021 Agency Priority Goal target.

Metric Details: This measure tracks the status of 166 areas that were designated nonattainment and listed in 40 CFR Part 81 as of the end of FY 2017. Areas designated to nonattainment after October 1, 2017 are not included. Nonattainment areas are areas that EPA determined do not meet primary or secondary NAAQS, or that contribute to air quality in a nearby area that does not meet a non-revoked primary or secondary NAAQS. Areas are considered redesignated based on the effective date of the redesignation. For multi-state nonattainment areas, all state portions of the area must be redesignated to attainment for the area to be removed from the list of nonattainment areas. Under the CAA, states are responsible for initiating the redesignation process and EPA's authority to approve a state's request to redesignate nonattainment areas hinges on the state meeting the minimum requirements of the CAA, which include: (1) a demonstration that the area has air quality that is attaining the NAAQS; (2) establishing that pollution reductions are due to implementing permanent and enforceable measures; (3) a 10-year maintenance plan that includes contingency measures to be triggered in the event of a re-violation of the NAAQS; and (4) satisfying any other applicable and outstanding attainment planning and emissions control requirements. Focusing efforts on reducing the number of nonattainment areas helps ensure that states and EPA, in the spirit of maintaining effective partnerships, prioritize taking timely and necessary actions to improve air quality in nonattainment areas through the implementation of permanent and enforceable pollution control measures, so that states can submit, and EPA can approve, redesignation requests for areas once they attain a NAAQS. This measure tracked progress toward a FY 2020-2021 Agency Priority Goal (APG).

(PM CRT) Number of certificates of conformity issued that demonstrate that the respective engine, vehicle, equipment, component, or system conforms to all of the applicable emission requirements and may be entered into commerce.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target			5,200	5,000	5,000	4,700	Certificates	Above Target	
Actual	4,453	5,109	4,869	4,711	4,843	5,351	Certificates	Above Target	

Key Takeaways:

- The total number of certificates issued by EPA in FY 2021 was 508 more than in FY 2020.
- EPA continues to issue vehicle and engine certificates of conformity in a timely manner and in pace with the numbers of requests received.

 $^{^{737}}$ The baseline is 166 nonattainment areas as of 10/1/2017.

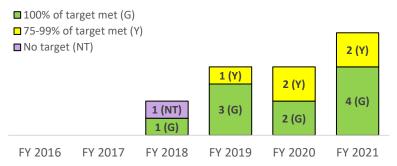
GOAL 1: A Cleaner, Healthier Environment

Metric Details: This measure tracks the number of certificates of conformity issued in a given year. The CAA requires that engines, vehicles, equipment, components, or systems receive a certificate of conformity which demonstrates compliance with the applicable requirements prior to introduction to U.S. commerce. EPA reviews all submitted requests and issues certificates of conformity when the manufacturer demonstrates compliance with all applicable requirements. This measure illustrates EPA's annual certification workload. The number of certification requests is determined by the product planning of manufacturers and will fluctuate from year to year. EPA strives to issue vehicle and engine certificates of conformity in a timely manner and in pace with the numbers of requests received.

Objective 1.2 – Provide for Clean and Safe Water: Ensure waters are clean through improved water infrastructure and, in partnership with states and tribes, sustainably manage programs to support drinking water, aquatic ecosystems, and recreational, economic, and subsistence activities.

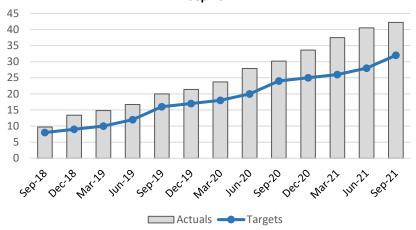
Performance toward target over time

Number of measures by percent of target achieved



Counts are of measures that exist in FY 2021. Chart does not include measures that previously existed but were eliminated prior to FY 2021.

Non-Federal Dollars (Cumulative, in Billions) Leveraged by EPA Water Infrastructure Finance Programs, Sep 2018 - Sep 2021



Summary of progress toward strategic objective:

- Re-initiated rulemaking activities for Defining Waters of the U.S and Clean Water Act (CWA) 401 Water Quality Certifications. Also published a final rulemaking for the Steam Electric Power Generating Effluent Guidelines and proposed the fifth drinking water Unregulated Contaminant Monitoring Rule (UCMR 5). Further, published the final National Primary Drinking Water Regulations: Lead and Copper Rule Revisions and issued the final Regulatory Determination for perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) in drinking water.
- Ninety three percent of the population served by community water systems (CWSs) received drinking water that meets all applicable health-based drinking water standards. Of the 3,508 CWSs with health-based violations as of September 30, 2017, 2,854 (81%) have returned to compliance.
- Exceeded the \$8 billion target for non-federal dollars leveraged by EPA water infrastructure finance programs by over \$4 billion. The Water Infrastructure Finance and Innovation Act (WIFIA) Program closed 26 transactions totaling over \$5.3 billion in loans to help finance more than \$11.4 billion for water infrastructure projects and create over 37,000 jobs.
- EPA engaged co-regulators at the Army Corps of Engineers to review prior critical CWA 404-related actions, re-establishing the prominence of science and policy in major actions including Bristol Bay, Alaska and Nationwide Permits.

Challenges:

- The COVID-19 pandemic has made providing safe drinking water to the public ever more challenging and thus more critical. Staff and chemical supply shortages, aging infrastructure, degradation of sources of drinking water, pressures from extreme weather events, accidental and intentional incidents, and limited technical, managerial and financial capacity remain challenges for the drinking water sector.
- Nutrient and stormwater pollution present ongoing challenges for maintaining clean and safe water. EPA continues to partner with states and tribes on establishing standards, permitting and innovative approaches to manage this challenge.
- Per- and polyfluoroalkyl substances (PFAS) are bioaccumulative, persistent in the
 environment and potentially toxic in small amounts. EPA's <u>PFAS Strategic</u>
 <u>Roadmap</u> (available at https://www.epa.gov/pfas/pfas-strategic-roadmap-epas-commitments-action-2021-2024) lays-out a whole-of-agency approach to addressing PFAS.

Long-Term Performance Goal - By September 30, 2022, reduce the number of community water systems out of compliance with health-based standards to 2,700⁷³⁸.

Annual performance goal that supports this long-term performance goal:

(PM DW-02) Number of community water systems still in noncompliance with health-based standards since September 30, 2017.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target						875	CWSs	Below Target	11
Actual		3,508	1,718	1,128	1,048	654	CWSS	Below Target	

Key Takeaways:

- Ninety-three percent of the population served by community water systems received drinking water that meets all applicable health-based drinking water standards. Of the 3,508 CWSs with health-based violations as of September 30, 2017, 2,854 (81%) have returned to compliance.
- Conducted approximately 563 engagements with states, tribes, and local communities to strengthen the technical, managerial, and financial capacity of drinking water systems. Also trained over 6,555 water and wastewater utilities to become more resilient to any natural or manmade incident that could endanger water and wastewater services.
- In response to unprecedented nationwide supply chain disruptions due to the COVID-19 pandemic, EPA implemented a program for water and wastewater utilities to (1) obtain immediate technical assistance for imminent treatment chemical shortages; and (2) apply for a certification of need through Safe Drinking Water Act Section 1441 for treatment chemicals that are not reasonably available.

Metric Details: This measure tracks the number of community water systems still in noncompliance with the health-based National Primary Drinking Water Regulations (Maximum Contaminant Level or treatment technique) during any part of the year, that were included in the FY 2017 baseline of 3,508. A CWS is a public water system that supplies water to the same population year-round. There are approximately 50,000 CWSs. Data are derived from the Safe Drinking Water Information System Federal Data Warehouse (SDWIS-FED), which contains information about violations by public water systems as reported to EPA by the primacy agencies (states and tribes with EPA-delegated enforcement responsibility).

⁷³⁸ Baseline is 3,508 community water systems out of compliance with health-based standards as of FY 2017. (Footnote updated from *FY 2018-2022 EPA Strategic Plan* published February 12, 2018.)

Long-Term Performance Goal - By September 30, 2022, increase by \$40 billion the non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA)⁷³⁹.

Annual performance goal that supports this long-term performance goal:

(PM INFRA-01) Billions of non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target			8.0	8.0	8.0	8.0	Billions of	Above Target	
Actual	8.1	8.6	9.7	10.3	10.2	12.1	Dollars	Above Target	

Key Takeaways:

- The Clean Water State Revolving Fund (CWSRF), Drinking Water State Revolving Fund (DWSRF), and WIFIA Programs leveraged over \$12 billion in non-federal dollars for water infrastructure projects.
- The WIFIA program closed 26 transactions totaling over \$5.3 billion in loans to help finance more than \$11.4 billion for water infrastructure projects and create over 37,000 jobs.
- The CWSRF and DWSRF have cumulatively provided \$190 billion in water infrastructure project financing to fund over 42,800 water quality infrastructure projects and 16,300 drinking water projects.

Metric Details: This measure tracks funds leveraged by the three primary water infrastructure programs, DWSRF, CWSRF, and WIFIA Program. These programs represent the largest federal source of funds to address this critical component of our nation's drinking water and clean water infrastructure. Non-federal funds include loans made from recycled loan payments, bond proceeds, state match, interest earnings, and co-funding from non-SRF sources. EPA will increase the amount of non-federal funds leveraged by providing communities with tools, training, and resources to help plan for infrastructure improvements and identify funding opportunities. SRF data are tracked in the CWSRF Benefits Reporting System and DWSRF Project Reporting System. The baseline does not include WIFIA leveraged dollars because no loans were closed prior to FY 2018. This measure tracked progress toward a FY 2020-2021 Agency Priority Goal (APG).

⁷³⁹ Baseline is \$32 billion in non-federal dollars leveraged from the CWSRF and DWSRF between FY 2013 and FY 2017 (i.e., loans made from recycled loan repayments, bond proceeds, state match, and interest earnings). The baseline does not include WIFIA leveraged dollars because no loans were closed prior to FY 2018. (Footnote updated from FY 2018-2022 EPA Strategic Plan published February 12, 2018.)

Long-Term Performance Goal - By September 30, 2022, reduce the number of square miles of watershed with surface water not meeting standards by 37,000 square miles 740.

Annual performance goals that support this long-term performance goal:

(PM SWP-01) Square miles of watersheds with surface waters not meeting standards.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	3
Target			No Target Established	497,728	564,536	539,536	Square Miles	Below Target	111
Actual			N/A	493,930	561,268	533,062	-		

Key Takeaways:

- For FY 2021, an additional 28,206 square miles are now meeting standards from the universe of waters that were not meeting standards as of August 30, 2019.
- States have made progress catching up on the submittal of Integrated Reports via EPA's Assessment, Total Maximum Daily Load (TMDL) Tracking and Implementation System (ATTAINS) with an additional 36 electronic submissions in FY 2021.
- EPA has achieved a reduction of 54,474 square miles since January 2019, already exceeding the *FY 2018-2022 EPA Strategic Plan* goal of 37,000 by 17,474 square miles.
- EPA's How's My Waterway Application plays a critical role in communicating standards met in surface waters to the American public. EPA continues to develop this platform and add new functionality to its premier application. The application continues to see significant usage within the education community, routinely placing in the top 10 of weekly web-hits for EPA web sites.

Metric Details: Beginning in FY 2020, this measure tracks water quality standards attainment in the 587,536 square miles of waters previously identified as impaired in a state Integrated Report as of August 30, 2019. In FY 2019, the measure tracked progress using a baseline of 506,728 square miles of waters identified as impaired in a state Integrated Report as of December 31, 2018. Water quality standards attainment means that (1) the impairments have been effectively removed due to actions including water quality restoration efforts, more complete monitoring to better understand waterbody conditions, or appropriate changes in water quality standards; and (2) the waterbody now either fully supports the use or meets the water quality criterion for that particular pollutant or stressor for which it had been impaired. Data are tracked in ATTAINS. States submit an Integrated Report to EPA every two years, including information on the status of state waters. EPA uses state geospatial data to calculate results for this measure.

⁷⁴⁰ Baseline is 587,536 square miles of impaired waters as of August 30, 2019. (Footnote updated from FY 2018-2022 EPA Strategic Plan published February 12, 2018.)

(PM SWP-02) Square miles of watersheds with surface waters not meeting standards because of nutrients.

		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	111
Ī	Target						183,596	Square Miles	Dalayy Tamaat	
	Actual				198,335	191,768	182,726	Square Miles	Below Target	

Key Takeaways:

- For FY 2021 an additional 9,042 square miles are now meeting standards from the universe of waters that were not meeting standards due to nutrients.
- Nonpoint sources are large contributors to many waters impaired by nutrient pollution. In FY 2021, the Clean Water Act Section 319 grant program helped to restore almost 60 waterbodies. Many nonpoint source management projects reduce nutrient pollution as well as pathogens and excess sediment.

Metric Details: This measure tracks water quality standards attainment in the 202,096 square miles of waters identified as impaired due to nutrients in a state Integrated Report as of August 30, 2019. Data are tracked in ATTAINS.

(PM TMDL-02) Percentage of priority TMDLs, alternative restoration plans, and protection approaches in place.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target				50	67	84	Percent	Above Target	[
Actual	9	14	33.3	51.2	63.5	74.1			
Numerator	8,822	14,045	33,194	48,544	59,470	61,718	Square Miles		
Denominator	101,141	99,424	99,415	94,806	93,653	83,308			

Key Takeaways:

- There are fewer than expected priority plans in place due to the complexity of technical and process issues that arose during TMDL, restoration plan, and protection approach development, as well as some states' shifts in long-term priorities for plans in development.
- States and Regions have made progress on achieving their long-term priorities for TMDLs and other plans under the collaborative EPA-State Long-Term CWA Section 303(d) Vision. For FY 2021, an additional 2,247 square miles of catchment areas have priority plans in place. Measures tracking resources (e.g., Qlik measures dashboard and the Scenario Builder Tool) assist states and EPA in determining informal annual commitments and monitoring plan development over the course of the year.

Metric Details: This measure tracks state priority waters with a TMDL, alternative restoration, or protection plan in place. EPA, states, and tribes cooperatively developed A Long-Term Vision for Assessment, Restoration and Protection under the CWA Section 303(d) Program, which encourages focused attention on priority waters and acknowledges that states have flexibility in using available tools – TMDLs, alternative restoration plans, and protection approaches – to restore and protect water quality. The calculation method provides 0.5 credit for plans under development and full credit when EPA approves a plan. The goal is to have 100% of priority waters with plans approved or accepted by FY 2022. Data are tracked in ATTAINS.

(PM NPDES-03) Number of existing EPA-issued NPDES permits in backlog.

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	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	7
Target				360	280	230	Permits	Below Target	Ш
Actual			456	373	333	284			

Key Takeaways:

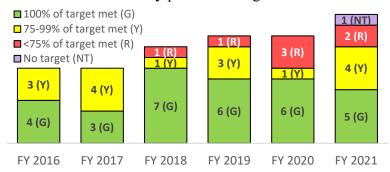
- EPA reduced its backlog of existing NPDES permits by 15% in FY 2021, and by 48% since March 2018. EPA also prevented 35 existing permits from becoming backlogged in FY 2021. Reasons for remaining delays include missing information from permittees, and highly complex permitting issues.
- For the permits remaining in the backlog, 40 are eligible for coverage under the Small Wastewater Treatment Facility General Permit issued by EPA Region 1 on September 28, 2021 and 42 permits have either completed public notice or are currently out for public notice.
- EPA worked closely with its regional offices to identify challenges and develop solutions to complex permitting issues, such as those related to 401 certification, the definition of Waters of the United States (WOTUS), Clean Water Act 316(b), and emerging contaminants such as per- and polyfluoroalkyl substances (PFAS). These efforts also will help prevent future permits from becoming backlogged.

Metric Details: This measure tracks existing EPA-issued NPDES individual permits that are administratively continued because they have passed their expiration date and are awaiting reissuance. Improving the timing for issuance and reissuance of NPDES permits provides greater certainty for the regulated community by ensuring permits reflect the most up-to-date requirements and scientific information to protect water quality. The CWA states NPDES permits must be renewed every five years. However, a permit can be administratively continued if the facility has submitted an application for reissuance and EPA does not reissue the permit before its expiration date through no fault of the permittee. The conditions of the expired permit continue in force until the effective date of the new or reissued permit. For purposes of this measure, permits are removed from the backlog as soon as the Agency takes final action on the permit (issuance, denial, or termination). Data are tracked in EPA's Integrated Compliance Information System (ICIS)-NPDES Database.

Objective 1.3 – Revitalize Land and Prevent Contamination: Provide better leadership and management to properly clean up contaminated sites to revitalize and return the land back to communities.

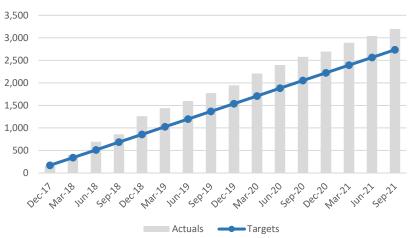
Performance toward target over time

Number of measures by percent of target achieved



Counts are of measures that exist in FY 2021. Chart does not include measures that previously existed but were eliminated prior to FY 2021.

Number of Brownfields Sites Made Ready for Anticipated Use, Dec 2017 - Sep 2021



Summary of progress toward strategic objective:

- The Superfund Program made ready for sitewide anticipated use 26 sites, completed 75 remedial action projects, and brought human exposures under control at 13 sites. Additionally, the Program completed 186 superfund removals.
- The Brownfields Program made 616 sites ready for anticipated use and leveraged \$2.1 billion in cleanup and redevelopment funds at brownfields sites.
- Programs operating under the Resource Conservation and Recovery Act (RCRA) made 139 corrective action facilities ready for anticipated use, constructed 57 final remedies, and issued 112 permit renewals at hazardous waste facilities. Additionally, the recycling and food waste prevention program re-evaluated voluntary program engagement and has shifted focus to developing measures in support of the National Recycling Strategy.
- The Underground Storage Tanks (UST) Program completed 7,271 cleanups that meet risk-based standards for human exposure and groundwater migration.

Challenges:

- Missed Superfund and brownfields ready for anticipated use and UST cleanup targets.
 EPA and the states face challenges such as technically difficult cleanups, lack of viable responsible parties and cleanup funding, legislative limitations on liability, variations in cleanup standards and adoption of risk-based corrective action.
- COVID-19 played a role in reducing site access and state staff availability to oversee cleanups. Owners and operators were hesitant to expend the resources necessary to move cleanups forward and, in some cases, have been impeded by the availability of cleanup contractors and equipment.
- The remaining sites across all programs are increasingly complicated, requiring more resources in terms of personnel, funds, and expertise to complete cleanup actions.

Long-Term Performance Goal - By September 30, 2022, make 255 additional Superfund sites ready for anticipated use (RAU) site-wide⁷⁴¹.

Annual performance goals that support this long-term performance goal:

(PM S10) Number of Superfund sites made ready for anticipated use site-wide.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	щ .
Target	45	45	51	51	51	51	Sites	Alayra Tamaat	
Actual	41	43	51	48	34	26	Sites	Above Target	

Key Takeaways:

- Missed the target, making 26 Superfund sites sitewide ready for anticipated use (SWRAU), compared with the target of 51.
- Fewer than 51 sites had a reasonable likelihood of achieving SWRAU in FY 2021 and many of those sites faced significant challenges including: coordination with external entities not leading to desired progress on internal controls (e.g., controls not enforceable by local authorities, controls not aligned with state requirements); absent, deceased, or uncooperative landowners; lawsuits restricting access for site work or delaying institutional controls; changing land uses which can result in the need for additional controls; and the discovery of potential new exposure pathways or emerging contaminants.
- As the potential SWRAU universe decreases, the remaining sites might require more resources and potentially face more significant obstacles to SWRAU achievement.

Metric Details: This measure tracks EPA's progress in cleaning up and preparing Superfund sites for sitewide reuse (both private and federal facility) while also ensuring human health and environmental protection. It measures the number of construction complete National Priorities List (NPL) or Superfund Alternative Approach (SAA) sites for which all: (1) remedy decision document (e.g., record of decision) cleanup goals have been achieved for media that may affect a site's current and reasonably anticipated future land use, so that there are no unacceptable risks; and (2) institutional or other controls required in remedy decision document(s) have been put in place. EPA documents the SWRAU determination directly in the Superfund Enterprise Management System (SEMS) once a site meets all required criteria and the appropriate EPA regional personnel have approved the determination. The site universe tracked for this measure includes final and deleted NPL sites and non-NPL sites with SAA agreements. EPA's universe of sites meeting the SWRAU criteria through the end of fiscal year 2021 had a net total of 995 sites, including 980 final and deleted NPL sites and 15 non-NPL sites with SAA agreements in place. As of the end of FY 2021 there were 1,322 final NPL sites and 68 non-NPL sites with SAA agreements. This measure tracked progress toward an FY 2020-2021 Agency Priority Goal (APG).

(PM 170) Number of remedial action projects completed at Superfund sites.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target	105	105	95	95	80	80	Projects	Above Target	
Actual	105	97	87	89	91	75	Projects	Above Target	

Key Takeaways:

• Completed 75 remedial action projects or about 94% of the target of 80.

⁷⁴¹ By the end of FY 2017, 836 Superfund sites had been made RAU site-wide.

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- EPA contributes approximately 30 percent of annual accomplishments using Superfund dollars for project completions. Potentially responsible parties (PRPs) and Federal Facilities (FF) contribute 70 percent of annual accomplishments. EPA does not have direct control over PRP and FF project work completion but does have influence over negotiations during the enforcement process. Once working commences, PRPs should be following the established schedule to the maximum practical extent. EPA oversees the PRP work yet has limited influence over the timing of when remedial projects are worked on and/or completed.
- These remedial projects are susceptible to technical issues, equipment downtime, seasonal impacts, and most notably in FY 2021, impacts from the COVID-19 pandemic.

Metric Details: This measure tracks the number of remedial action projects completed at Superfund sites. By tracking the completion of a discrete scope of Superfund cleanup activities (for both private and federal facility sites), this measure documents incremental progress in reducing risk to human health and the environment. Multiple remedial action projects may be necessary to achieve sitewide construction completion. EPA captures these data in SEMS.

(PM 151) Number of Superfund sites with human exposures brought under control.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	ıl
Target	9	9	8	12	10	10	Sitos	A bayya Tamaat	
Actual	12	24	32	17	20	13	Sites	Above Target	

Key Takeaways:

- Exceeded the target, achieving 13 Superfund sites with human exposures brought under control, compared with the target of 10.
- Previous human exposures under control determination retractions continue to arise due to issues related to emerging contaminants and vapor intrusion (VI) as a new pathway for contaminants. EPA anticipates the need to develop potential new rules for contaminants such as lead in the future.

Metric Details: This measure documents progress achieved in controlling unacceptable human exposures to contamination at both private and federal facility Superfund sites and denotes a site-wide accomplishment. The human exposure determination at a site can change over time as conditions across portions (operable units) of a site change. EPA regional offices enter human exposure determinations and supporting data into SEMS. Results reflect a net accomplishment as sites can shift between human exposure under control to human exposure not under control or human exposure insufficient data. The status change often occurs when a previously unknown exposure pathway (e.g., VI) or contaminant is discovered, and a reasonable expectation exists that people could be exposed or that there are insufficient data to make such a determination until further investigation takes place.

(PM 137) Number of Superfund removals completed.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction
Target	275	275	175	175	141	141	Removals	Above Target
Actual	226	255	242	233	197	150	Removais	Above Target

Key Takeaways:

• Met the target for Superfund removals completed, achieving 150 compared with the target of 141.

Metric Details: This measure tracks Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) removal-related hazardous waste cleanups, known as Superfund removal actions, including those that are Superfund-lead and PRP-lead. There is no pre-established universe of removal sites, as removal actions take place after a release has occurred. Data are tracked in SEMS.

Long-Term Performance Goal - By September 30, 2022, make 3,420 additional brownfields sites RAU⁷⁴².

Annual performance goals that support this long-term performance goal:

(PM B30) Number of brownfields sites made ready for anticipated use.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target	600	600	684	684	684	684	Sites	Above Target	
Actual	547	531	861	910	809	616	Sites	Above Target	

Key Takeaways:

- Missed the target, making 616 brownfields sites ready for anticipated use compared with the target of 684.
- The remaining universe of EPA-funded brownfields sites require more resource-intensive solutions to be made RAU.
- EPA worked aggressively to reduce the backlog of open work packages (collecting delayed data) over FY 2018-2021, resulting in an estimate of 200 additional sites reaching RAU status.

Metric Details: This measure tracks the number of properties/sites benefiting from EPA brownfields funding that have been assessed and determined not to require cleanup, or where cleanup has been completed and institutional controls are in place if required, as reported by cooperative agreement recipients into the Assessment, Cleanup and Redevelopment Exchange System (ACRES) database. This activity results in additional sites available for productive reuse. This measure tracked progress toward an FY 2020-2021 APG.

(PM B37) Billions of dollars of cleanup and redevelopment funds leveraged at brownfields sites.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target	1.1	1.1	1.1	1.3	1.3	1.3	Billions of	Abaya Tagat	
Actual	1.47	1.7	2.2	2.3	4.9	2.1	Dollars	Above Target	

Key Takeaways:

- Exceeded the target, achieving \$2.1 billion in cleanup and redevelopment funds leveraged, compared with the target of \$1.3 billion.
- The result is partially due to EPA completing an effort to reduce the backlog of open work packages.
- EPA anticipates total dollars leveraged to fall closer in line with the \$1.3 billion target in future years with completion of the work package effort.

Metric Details: This measure tracks additional dollars leveraged by assessment or cleanup activities conducted with EPA brownfields funding, as reported by cooperative agreement recipients at a specific property into the ACRES database.

⁷⁴² From FY 2006 through the end of FY 2017, 5,993 brownfields properties/sites had been made RAU. (Footnote updated from FY 2018-2022 EPA Strategic Plan.)

Long-Term Performance Goal - By September 30, 2022, make 536 additional Resource Conservation and Recovery Act (RCRA) corrective action facilities RAU⁷⁴³.

Annual performance goals that support this long-term performance goal:

(PM RSRAU) Number of RCRA corrective action facilities made ready for anticipated use.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target			75	91	117	133	Facilities	Above Target	1111111
Actual	75	72	117	127	169	146	racilities	Above Target	

Key Takeaways:

• Met the target, making 146 RCRA corrective action facilities ready for anticipated use.

Metric Details: This measure tracks the number of RCRA corrective action facilities made RAU. To be determined RAU, facilities must meet the following criteria: human exposure under control; final cleanup goals achieved for media that would affect the anticipated use; and if needed, controls in place to ensure long-term protectiveness. The universe for this measure was established in FY 2009 and includes the 3,779 facilities subject to RCRA corrective action. Information is entered into the RCRAInfo database by authorized states and/or EPA regional offices overseeing cleanups.

(PM CA5RC) Number of RCRA corrective action facilities with final remedies constructed.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target				98	98	73	Facilities	Ahayya Tamaat	
Actual	64	67	70	80	64	57	racillues	Above Target	

Key Takeaways:

- There were significant issues with completing construction on the remaining universe of sites. These include inclement weather limiting access to sites and ability to complete construction, and a decrease in staff capacity and availability at the site.
- The remaining cleanups are more complex and resource intensive than completed cleanups.

Metric Details: This measure tracks the number of RCRA corrective action facilities with final remedies constructed. The universe for this measure was established in 2009 and includes the 3,779 facilities subject to RCRA corrective action. Information is entered into the RCRAInfo database by authorized states and/or EPA regional offices overseeing cleanups. This measure tracks a mid-term step in the progression toward completing facility cleanup.

⁷⁴³ From FY 1987 through FY 2017, 1,232 of the universe of 3,779 high priority RCRA corrective action facilities had been made RAU site-wide. (Footnote updated from *FY 2018-2022 EPA Strategic Plan.*)

(PM HW5) Number of permit renewals issued at hazardous waste facilities.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target			64	64	105	100	Facilities	Alassa Tanasat	шпш
Actual	89	125	109	124	104	130	racillues	Above Target	

Key Takeaways:

• Exceeded the target, issuing 130 permit renewals compared with the target of 100. These results are largely due to increased coordination between headquarters and Regional offices.

Metric Details: This measure tracks RCRA hazardous waste permit renewals or clean-closures in the universe of permitted facilities using the RCRAInfo database. This does not include all permit maintenance since permit modifications cannot be projected and are not included. Maintaining up-to-date permits ensures that permitted facilities have consistent and protective standards to prevent releases. Proper standards for waste management can protect human health, prevent land contamination/degradation and other releases, and avoid future cleanups and associated costs. EPA directly implements the RCRA Program in Iowa and Alaska and provides leadership, work-sharing, and support to the remaining states and territories authorized to implement the permitting program.

(PM RFW) Number of stakeholder actions taken to increase recycling and reduce food loss and waste.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	No Trend
Target						9,750	A atiana	Alassa Tanasat	Data
Actual					8,968	8,768	Actions	Above Target	

Key Takeaways:

- Missed the target, achieving 8,768 stakeholder actions taken to increase recycling and reduce food loss compared with the target of 9,750.
- Shifted resources to support development of the new National Recycling Strategy, which was released on November 15, 2021. This reallocation of support likely reduced stakeholder results reporting.

Metric Details: This measure tracks the number of stakeholder actions influenced by EPA to increase recycling and reduce food loss and waste. EPA facilitates and incentivizes stakeholder action through grants, voluntary partnership programs, and public commitment/pledge initiatives. This measure aggregates the number of stakeholders that: (1) receive EPA recycling and food waste grants; (2) join and participate in EPA voluntary partnership programs including WasteWise, State Measurement Program, Electronics Challenge, Federal Green Challenge, and Food Recovery Challenge; or (3) sign EPA public commitment/pledge initiatives including America Recycles Pledge, 2030 Food Loss and Waste Champions, and Winning on Reducing Food Waste. Stakeholder data are collected via EPA's programmatic webpages and the Sustainable Materials Management data management system. A weighting factor is applied to the different stakeholder actions to account for more significant contributions and influence on the rate of domestic recycling and reductions of food loss and waste. The weighting factor for new participants in the challenges and WasteWise is 3:1; for active participants in those programs is 7:1; and for state participants in the State Measurement Program and grant recipients are each 10:1.

Long-Term Performance Goal - By September 30, 2022, complete 56,000 additional leaking underground storage tank (LUST) cleanups that meet risk-based standards for human exposure and groundwater migration⁷⁴⁴.

Annual performance goals that support this long-term performance goal:

(PM 112) Number of LUST cleanups completed that meet risk-based standards for human exposure and groundwater migration.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target	8,600	8,600	11,200	11,200	11,200	11,200	Claanyma	Alexyo Towast	ш
Actual	8,977	8,775	8,128	8,358	7,211	7,271	Cleanups	Above Target	

Key Takeaways:

- Missed the target, completing 7,271 LUST cleanups that meet risk-based standards for human exposure and groundwater migration, compared with the target of 11,200.
- The targets for this measure were not achievable at current resource levels. Despite these challenges, EPA collaborated frequently with state and regional partners to achieve as many cleanups as possible.
- With fewer remaining sites to be cleaned up, it continues to get more challenging to meet cleanup targets. The states face challenges such as technically difficult cleanups, lack of viable responsible parties and cleanup funding, legislative limitations on liability, and variations in cleanup standards and adoption of risk-based corrective action.
- COVID-19 also played a role in reducing site access and state staff availability to oversee cleanups. Owners and operators were hesitant to expend the resources necessary to move cleanups forward and, in some cases, have been impeded by the availability of cleanup contractors and equipment.

Metric Details: This measure tracks the number of petroleum-contaminated sites where the states, tribes and EPA have completed cleanup activities. The totals include cleanups reported by states as well as EPA cleanups in Indian Country. Sites in Indian country represent approximately 0.2% of total cleanups completed. EPA uses the LUST4 database to track progress. The universe of confirmed releases pending cleanup changes over time as releases are identified and cleanups are completed.

(PM UST01) Number of confirmed releases at UST facilities.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	No Trend
Target						No Target Established	Releases	Below Target	Data
Actual	5,582	5,678	5,654	5,375	4,944	4,991			

Key Takeaways:

• The UST prevention program works to ensure that underground sources of drinking water (groundwater) are protected from petroleum and associated chemicals leaking from USTs. By measuring the annual number of confirmed releases, we anticipate a continued declining trend as prevention measures reduce the number of releases.

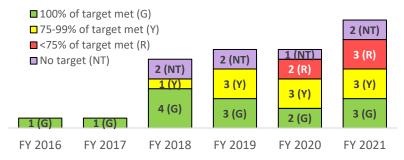
Metric Details: This measure tracks the number of confirmed releases discovered at UST facilities during the year. The number of confirmed releases are targeted to decline by 75 each year.

 $^{^{744}\,\}mathrm{By}$ the end of FY 2017, 469,898 LUST cleanups had been completed.

Objective 1.4 – Ensure Safety of Chemicals in the Marketplace: Effectively implement the Toxic Substances Control Act, and the Federal Insecticide, Fungicide, and Rodenticide Act, to ensure new and existing chemicals and pesticides are reviewed for their potential risks to human health and the environment and actions are taken when necessary.

Performance toward target over time

Number of measures by percent of target achieved



Counts are of measures that exist in FY 2021. Chart does not include measures that previously existed but were eliminated prior to FY 2021.

Summary of progress toward strategic objective:

- Completed 390 Toxic Substances Control Act (TSCA) Sec. 5 notice and exemption submissions.
- Finalized the remaining seven of the first 10 EPA-initiated existing chemical risk evaluations.
- Issued 96 proposed and 145 final significant new use rules (SNURs).
- Increased new chemical protections by implementing new policies to stop issuing "not likely to present an unreasonable risk" determinations based on limited information and removing the assumption of worker use of personal protective equipment (PPE) in risk conclusions.
- Implemented a new policy on Per- and Polyfluoroalkyl Substances (PFAS) Low Volume Exemption (LVE) applications and launched a PFAS LVE Stewardship Program.
- Finalized five rules on Persistent, Bioaccumulative, and Toxic (PBT) chemicals intended to provide critical protections for workers and other potentially at-risk groups.
- Extended compliance dates and issued a No Action Assurance on one PBT chemical: phenol, isopropylated phosphate (PIP) (3:1), to prevent supply chain disruption.
- Completed 74 pesticide registration review cases and 37 draft risk assessments, raising those total completions to 555 and 682, respectively, of the 725 that EPA must complete by October 1, 2022.
- Registered 14 pesticide new active ingredients.
- Completed 2,556 Pesticide Registration Improvement Act (PRIA) actions with only 64 missing the PRIA due date.
- Completed over 300 expedited actions in response to COVID-19, including the addition of 73 List N products effective against SARS-CoV-2 (570 total).
- Continued the Office of Pesticide Programs (OPP)'s digital transformation, with the
 Antimicrobials Division entering the Salesforce pilot in February 2021 and developing
 performance metric dashboards using customer relationship management software in
 Salesforce.

Challenges:

- Resource limitations created significant challenges in completing core work in accordance with the corresponding statutory deadlines and constraining the undertaking of new initiatives.
- EPA struggled to meet FY 2021 pesticide program core work targets due to litigation of chemicals in registration review, deficient applications, delays in registrant data or input, complexity of risk assessments, and volume of public comments on regulatory decisions.

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Long-Term Performance Goal - By September 30, 2022, complete all EPA-initiated TSCA risk evaluations for existing chemicals in accordance with statutory timelines⁷⁴⁵.

Annual performance goal that supports this long-term performance goal:

(PM TSCA1) Number of final EPA-initiated TSCA risk evaluations completed within statutory timelines.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target			No Target Established	N/A	10	N/A	Evaluations	Above Target	No Trend Data
Actual		0	N/A	N/A	3	N/A			

Key Takeaways:

- No final EPA-initiated TSCA risk evaluations for existing chemicals had statutory deadlines in FY 2021.
- In FY 2021, EPA completed the remaining seven EPA-initiated TSCA risk evaluations for existing chemicals that were initiated in FY 2016.
- The statutory deadline for the next set of EPA-initiated TSCA risk evaluations for existing chemicals is in FY 2023.

Metric Details: This measure tracks risk evaluation activity under TSCA. The risk evaluation process is the second step, following prioritization and before risk management, in EPA's existing chemical process. A risk evaluation is considered complete when the Federal Register Notice is signed. The purpose of risk evaluation is to determine whether a chemical substance presents an unreasonable risk to health or the environment, under the conditions of use identified in the final scope document. As part of this process, EPA must evaluate both hazard and exposure, and ensure decisions are based on the weight-of-scientific-evidence. The baseline is zero in FY 2017, as the TSCA Program is operating under new statutory authority. EPA initiated the next set of 20 risk evaluations in FY 2020, which are targeted to be completed within the full statutory timeframe of three and a half years. FY 2019 and FY 2021 have targets of Not Applicable because there were no statutory deadlines those years.

Long-Term Performance Goal - By September 30, 2022, complete all TSCA risk management actions for existing chemicals in accordance with statutory timelines⁷⁴⁶.

Annual performance goal that supports this long-term performance goal:

(PM TSCA2) Number of final existing chemical TSCA risk management actions completed within statutory timelines.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target			No Target Established	N/A	N/A	1	Actions	Above Target	No Trend Data
Actual		0	N/A	N/A	N/A	5			

⁷⁴⁵ There is no baseline for this measure, as the program is operating under new statutory authority.

⁷⁴⁶ There is no baseline for this measure, as the program is operating under new statutory authority.

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Key Takeaways:

- EPA finalized five rules on PBT Chemicals intended to provide critical protections for workers and other potentially at-risk groups.
- In addition, EPA extended compliance dates and issued a No Action Assurance on one PBT Chemical: PIP (3:1), to prevent supply chain disruption.

Metric Details: This measure tracks the number of risk management actions completed within statutory deadlines under TSCA. Risk management actions targeted for completion through FY 2022 address certain PBT chemicals. Statute requires a final rule to be issued by December 21, 2020 (in FY 2021). The baseline is zero in FY 2017, as the TSCA Program is operating under new statutory authority. FY 2019 and FY 2020 have targets of Not Applicable because there were no statutory deadlines in those years. Future actions to be targeted will address risks from existing chemicals identified in the risk evaluation process. Final risk management actions for those chemicals must be completed within the statutory period of two years after publication of the final risk evaluation (if unreasonable risk to human health or the environment is identified); a maximum two-year extension is allowed.

Long-Term Performance Goal - By September 30, 2022, complete all TSCA pre-manufacture notice final determinations in accordance with statutory timelines 747.

Annual performance goals that support this long-term performance goal:

(PM TSCA3) Percentage of final TSCA new chemical determinations for Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices completed within the initial 90-day statutory timeframe.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target			65	80	80	80	D4		
Actual		27	58.4	78	65	64	Percent	A 1 T4	
Numerator		67	45	103	52	86	Final	Above Target	
Denominator		248	77	132	80	134	Determinations		

Key Takeaways:

• Faced implementation challenges with risk assessments, submission of new information, and data submission in the context of incomplete information submitted by manufacturers. In addition, resource constraints forced trade-offs between new and backlogged submissions, constraining progress in both areas.

Metric Details: This measure tracks a subset of EPA's new chemicals review activity under TSCA – the review of Pre-Manufacture Notices (PMNs), Significant New Use Notices (SNUNs) and Microbial Commercial Activity Notices (MCANs) (but not new chemicals reviews covered by exemptions). EPA conducts these reviews prior to approving new chemicals or microbial substances in commerce, or new uses for existing chemicals that are subject to a SNUR, to determine whether the chemical substance or significant new use presents an unreasonable risk to human health or the environment. The statute requires a base review period of 90 days and allows EPA to extend this period another 90 days or for a different period at the request of a submitter. This measure tracks performance against the initial 90-day deadline only and tracks final determinations for submissions received by EPA in that fiscal year. Additional information and statistics about the New Chemicals Program are available at https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/statistics-new-chemicals-review.

⁷⁴⁷ Baseline is 58.4% of determinations made within 90 days in FY 2018. (Footnote updated from FY 2018-2022 EPA Strategic Plan published February 12, 2018.)

(PM TSCA3b) Percentage of final TSCA new chemical determinations for Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices completed within the full timeframes allowable by statute.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target				100	100	100	Domoomt		
Actual		100	100	100	100	100	Percent	Albarra Tamaat	
Numerator		567	292	429	347	197	Final	Above Target	
Denominator		567	292	429	347	197	Determinations		

Key Takeaways:

- Completed 390 TSCA Sec. 5 notice and exemption submissions.
- Issued 96 proposed and 145 final SNURs.

Metric Details: This measure tracks a subset of EPA's new chemicals review activity under TSCA, the review of PMNs, SNUNs, and MCANs (but not new chemicals reviews covered by exemptions). EPA conducts these reviews prior to approving new chemicals or microbial substances in commerce, or new uses for existing chemicals that are subject to a Significant New Use Rule, to determine whether the chemical substance or significant new use presents an unreasonable risk to human health or the environment. EPA has the authority to agree to voluntary suspensions of the initial 90-day statutory deadline at the request of a submitter. These suspensions provide EPA additional time to complete the required review following receipt of additional necessary information. This measure tracks performance against the full timeframes authorized under the statute. A performance result of 100% indicates that there were no instances in which EPA failed to complete a final determination within the agreed upon period of review. The baseline is 100% of determinations made within full timeframes allowable by statute in FY 2017.

Long-Term Performance Goal - By September 30, 2022, complete all cases of Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)-mandated decisions for the pesticides registration review program⁷⁴⁸.

Annual performance goals that support this long-term performance goal:

(PM FIFRA1) Number of FIFRA decisions completed through pesticides registration review.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	1
Target			58	75	110	110	Daninina	Above Target	
Actual	41	56	64	80	98	74	Decisions	Above Target	

Key Takeaways:

• EPA has completed over 76% of cases EPA must review by October 1, 2022.

• Faced challenges with litigation responses (chlorpyrifos, triazines, glyphosate), petitions (seed treatment, clothianidin, glyphosate), the high volume of public comments on preliminary decisions, the late submission of data, time needed to coordinate with other EPA offices (ethylene oxide, formaldehyde), and the workload associated with processing new antimicrobial product applications for COVID-19 response.

⁷⁴⁸ Baseline is a total of 239 decisions completed through FY 2017 of the known universe of 725. (Footnote updated from FY 2018-2022 EPA Strategic Plan published February 12, 2018.)

Metric Details: Through the Pesticide Registration Review Program, EPA is reviewing each registered pesticide every 15 years to determine whether it still meets the FIFRA standard for registration. FIFRA requires that all pesticides intended for use in the U.S. be registered (licensed) by EPA to ensure that they do not cause "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide." By law, EPA must complete the first 15-year cycle of registration review by October 1, 2022. The baseline is a total of 239 decisions completed through FY 2017 of a known universe of 725 cases (33%). Targets represent annual increments needed to reach the long-term performance goal by FY 2022.

(PM FIFRA2) Number of FIFRA registration review draft risk assessments completed.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target			70	72	80	60	Risk	A hove Torget	
Actual	59	76	112	85	100	37	Assessments	Above Target	

Key Takeaways:

- Completed fewer risk assessments than anticipated due to delays in registrant data or input, complexity of registrant data for certain chemicals, and the workload associated with processing new antimicrobial applications for COVID-19 response.
- EPA has completed 94% of draft risk assessments in support of the first cycle of registration review.

Metric Details: The baseline is a total of 349 draft risk assessments completed through FY 2017 of a known universe of 725 cases (48%).

Long-Term Performance Goal - By September 30, 2022, reduce the Pesticide Registration Improvement Act (PRIA) registration decision timeframe by an average of 60 days 749.

Annual performance goals that support this long-term performance goal:

(PM PRIA1) Average number of days to complete PRIA decisions for new active ingredients.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	11-44
Target			643	631	619	607	Days	Below Target	
Actual	687	638	603	686	876	852	Days	Below Target	

Key Takeaways:

• Experienced delays due to an adjustment to science review committee schedules in FY 2019, deficient applications, and the need for additional information to make regulatory determinations (e.g., new metabolite of concern identified which required additional data submission). EPA completed decisions for 14 new active ingredients in FY 2021, with timeframes ranging from 304 to 1,444 days. Five new active ingredients had decision timeframes greater than 1,000 days.

• Six of the 14 FY 2021 new active ingredients for which PRIA decisions were completed (43%) had statutory timeframes (730 days) that exceed the annual target, even without statutorily allowed extension of the due date being taken into account.

• Building on the existing augmented performance tracking for conventional pesticide new active ingredients, EPA expanded this effort to include biopesticide new active ingredients (the majority of new active ingredients completions in recent years), with tracking and data visualization provided using the new Salesforce system developed as part of EPA's digital transformation.

⁷⁴⁹ Baseline is an average timeframe of 655 days (range: 93-2,086 days) for PRIA decisions for 68 new active ingredients completed in FY 2015-2017.

GOAL 1: A Cleaner, Healthier Environment

Metric Details: To expedite the review and licensing of pesticides' new active ingredients, EPA will reduce the incidence of PRIA negotiations, improve meeting the timeframes specified in PRIA, and expedite the overall processing of reduced risk pesticides. The baseline is an average timeframe of 655 days (range: 93 to 2,086 days, standard deviation of 395 days) for PRIA decisions for 68 new active ingredients completed in FY 2015-2017. There are 36 different PRIA categories that relate to new active ingredients, with statutory time frames ranging from 7 to 24 months.

(PM PRIA2) Average number of days exceeding the PRIA decision timeframes for new active ingredients where the original PRIA due date was not met.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	ı I•
Target						263	Davis	Dalassy Tanaat	
Actual		117	155	353	353	297	Days	Below Target	

Key Takeaways:

• Result driven by three conventional pesticides out of 13 new active ingredients; reasons for missed target include deficient applications, data compensation issues, new metabolite of concern identified for one of the three active ingredients with additional data required, risk mitigation (including pollinator issues) and registrant response on risk mitigation language, and high volume of public comments.

Metric Details: The baseline is an average of 316 days exceeding the PRIA decision timeframes in the statute (range: 15 to 1,538 days) for 42 new active ingredients completed in FY 2015-2017.

(PM 091) Percentage of decisions (registration actions) completed on time (on or before PRIA or negotiated due dates).

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target	96	97	99	99	99	99	D		
Actual	99	99	99.7	98	98	97	Percent	A 1 T	
Numerator	2,157	2,008	2,193	2,034	2,339	2,492	D:-:	Above Target	
Denominator	2,174	2,026	2,199	2,085	2,385	2,556	Decisions		

Key Takeaways:

• Sixty-four PRIA actions were completed after the original or renegotiated (if the action was renegotiated) due date. There were higher than normal late completions for inert clearance actions and amendments for antimicrobial products adding claims related to List N for COVID-19 response.

Metric Details: Whereas PM PRIA1 tracks performance for new active ingredient decisions only, this measure relates to all PRIA categories described in the fee tables in FIFRA section 33(b)(3). Additionally, FIFRA section 33(f)(5) allows that EPA and the applicant may mutually agree to extend a decision time review period. Decisions completed on or before the negotiated due date but after the original PRIA due date are still considered "on-time" under this measure. More information on PRIA can be found at https://www.epa.gov/pria-fees/pria-overview-and-history. The baseline is 94% average of decisions completed on-time from FY 2014-2016.

Other Core Work supporting Objective 1.4

Annual performance goals:

(PM P2mtc) Reductions in million metric tons of carbon dioxide equivalent (MMTCO2e) released per year attributed to EPA pollution prevention grants.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction		
Target						No Target Established	NO ETTOO	A1	Ш	
Actual	1,615,883	1,698,160	1,596,876	1,494,189	Data Avail 10/2022	Data Avail 10/2022	MMTCO2e	Above Target		

Key Takeaways:

- FY 2021 results are not available due to the reporting lag noted below.
- Entities eligible for pollution prevention grants include state governments, colleges and universities recognized as instrumentalities of the state, and federally recognized tribes and intertribal consortia. In September 2020, EPA selected 42 such organizations to receive \$9.3 million in funding for FY 2020-2021 pollution prevention grants.

Metric Details: This measure tracks MMTCO2e reductions from all Pollution Prevention Grant Program activities. MMTCO2e is calculated by using an online tool to convert standard metrics for electricity, green energy, fuel use, chemical substitutions, water management, and materials management into MMTCO2e (https://www.epa.gov/p2/pollutionprevention-tools-and-calculators). In addition to greenhouse gas reductions, pollution prevention grants deliver financial savings and reductions in hazardous materials, water use, and energy use. Pollution prevention grants are "two-year" grants, with an optional third year for follow-up reporting and case study development. These grants have annual reporting but with a one-year reporting lag due to the grant reporting cycle. Baseline reduction of 299,000 metric tons of carbon dioxide equivalent (MMTCO2e) is attributed to EPA pollution prevention grants in FY 2019.

(PM SC1) Number of new products certified by EPA's Safer Choice program.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	11111
Target						200	D., - 4., -4.	A 1 T	
Actual	247	240	249	265	264	233	Products	Above Target	

Key Takeaways:

- The Safer Choice program has been challenged to grow and improve while meeting demand for certification.
- EPA plans to improve the tools that help product manufacturers submit high quality certification applications and in turn reduce EPA resource expenditure to review and certify products. These include third parties who can guide companies through the submission process and prepare dossiers for EPA certification decisions, and the Safer Chemical Ingredients List.

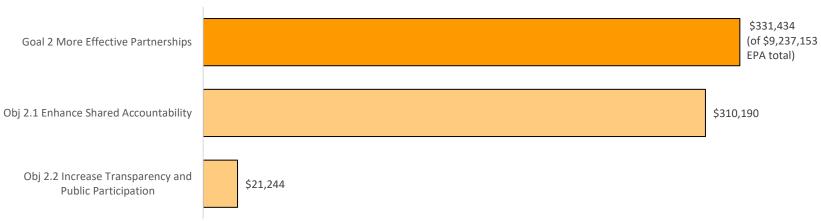
Metric Details: This measure tracks the total number of products certified by the Safer Choice program at the end of the year. Safer Choice is a voluntary program that helps consumers, businesses, and purchasers find products that contain ingredients that are safe for human health and the environment. Before a product can carry the Safer Choice label, EPA reviews all chemical ingredients, regardless of their percentage in the product. Every ingredient must meet stringent safety criteria for both human health and the environment, including carcinogenicity, reproductive/developmental toxicity, toxicity to aquatic life, and persistence in the environment. Certified products are verified by EPA to meet the Safer Choice Standard through initial certification, annual audits, and recertification every three years. The total includes Design for the Environment-certified antimicrobial products. Data are tracked in EPA's Safer Choice database. For additional information: https://www.epa.gov/saferchoice.

GOAL 2: More Effective Partnerships

Goal 2 at a Glance

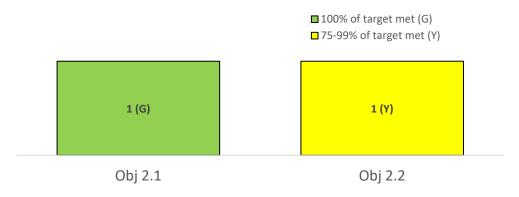
More Effective Partnerships: Provide certainty to states, localities, tribal nations, and the regulated community in carrying out shared responsibilities and communicating results to all Americans.





FY 2021 Performance toward target by objective

Number of measures by percent of target achieved



Objective 2.1 – Enhance Shared Accountability: Improve environmental protection through shared governance and enhanced collaboration with state, tribal, local, and federal partners using the full range of compliance assurance tools.

Performance toward target over time

Number of measures by percent of target achieved

■ 100% of target met (G)

☐ 75-99% of target met (Y)



Counts are of measures that exist in FY 2021. Chart does not include measures that previously existed but were eliminated prior to FY 2021.

Summary of progress toward strategic objective:

- Met compliance monitoring target by conducting 3,200 on-site inspections and 7,500 off-site compliance monitoring activities.
- Maximized use of advanced monitoring technologies, such as the Geospatial Measurement of Air Pollution (GMAP) mobile air monitoring vehicle, to support Clean Air Act inspections, identify community impacts, and target facilities for inspections.
- Surveyed over 100 EPA grant programs to better understand their reporting and tracking processes for the Grant Commitments Met EPA Learning Agenda priority area. Results will inform a sustainable, consistent process to negotiate and track outcomes for grants.
- Collaborated with states and tribes on eight E-Enterprise projects: developed a citizen science story map and completed 12 technical tribal case studies to increase awareness and share best practices with partners; trained inspectors from 37 states on the Smart Mobile Tools for Inspectors; initiated a collaborative Integrated Compliance Information System (ICIS) modernization board comprised of 10 state and local members and seven EPA members to ensure partner needs are considered as we update ICIS; over 300 facility reporters from Georgia, Washington, D.C. and Arizona used EPA's Combined Air Emissions Reporting System to report facilities' air emissions.
- Reviewed and approved 90% of state and tribal Quality Assurance Project Plans (QAPPs) within 120 days.
- Drafted EPA tribal direct implementation report that lays out a recommended framework for sustainable data reporting and review to improve tracking and accountability.
- Implemented over 1,600 actions from the 500 completed EPA-Tribal Environmental Plans (ETEPs), a joint planning approach to inform decisions on financial and technical assistance for environmental programs.
- Completed 110 tribal consultations, for a total of more than 767 since FY 2011.
- Held one national tribal conference call and 35 EPA-tribal topical workgroup calls on proposed Indian General Assistance Program (GAP) guidance revisions to provide clarity, reduce administrative burden, and provide maximum flexibility for tribes; and seven outreach/listening sessions on the allocation formula.

Challenges:

- EPA has no comprehensive system for tracking grant-related activities to evaluate environmental outcomes on a national scale.
- COVID-19 continues to disrupt some key compliance assurance activities, including a reduction in on-site inspections.
- COVID-19 continues to make it difficult to host in-person consultations with tribes, limiting their full participation in EPA consultation.

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Long-Term Performance Goal - By September 30, 2022, increase the number of grant commitments achieved by states, tribes, and local communities 750.

There are no annual performance goals associated with this long-term performance goal for FY 2021.

Long-Term Performance Goal - By September 30, 2022, increase the use of alternative shared governance approaches to address state, tribal, and local community reviews 751.

There are no annual performance goals associated with this long-term performance goal for FY 2021.

Other Core Work supporting Objective 2.1

Annual performance goal:

(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target	15,500	14,000	10,000	10,000	10,000	10,000	Inspections &	Above Target	
Actual	13,500	11,800	10,600	10,300	8,500	10,800	Evaluations	Above Target	

Key Takeaways:

- Due to the challenges of COVID-19, on-site inspection numbers remained low during much of FY 2021. However, EPA continued to prioritize off-site compliance monitoring activities (for example: review of responses to information requests to assess compliance; review of facility monitoring reports and/or sampling data) when on-site inspections were not possible, enabling the Agency to exceed the target.
- The FY 2021 results included approximately 3,200 on-site inspections and 7,500 off-site compliance monitoring activities. The sum of the two categories is a more reliable value because it smooths out some variability due to inconsistent definitions. Additionally, EPA has not historically required most types of off-site compliance monitoring activities to be entered into an EPA database, so these numbers are likely an incomplete snapshot of EPA's compliance monitoring activities. Due to the challenges of COVID-19, we cannot predict how the proportion of on-site inspections and off-site compliance monitoring activities will change in the future.
- Issued guidance in April 2020 to provide nationally consistent definitions for on-site inspections and off-site compliance monitoring (effective for all of FY 2020 for on-site inspections and from 4/1/2020 forward for off-site compliance monitoring). More consistent definitions and data entry will make the subtotal data more reliable going forward.

Metric Details: This measure tracks EPA inspections and off-site compliance monitoring activities to determine whether a facility or group of facilities is in compliance with applicable law. The measure was modified in FY 2018 to clarify the types of activities included. The targets reflect a recognition that states conduct the vast majority of inspections and an EPA focus on direct implementation programs.

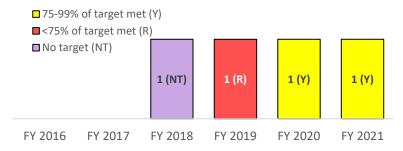
⁷⁵⁰ Universe (number of commitments contained in Performance Partnership Grants) is under development. (Footnote updated from FY 2018-2022 EPA Strategic Plan published February 12, 2018.)

⁷⁵¹ There is no baseline for this measure. (Footnote updated from FY 2018-2022 EPA Strategic Plan published February 12, 2018.)

Objective 2.2 – Increase Transparency and Public Participation: Listen to and collaborate with impacted stakeholders and provide effective platforms for public participation and meaningful engagement.

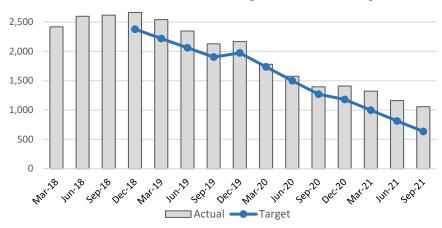
Performance toward target over time

Number of measures by percent of target achieved



Counts are of measures that exist in FY 2021. Chart does not include measures that previously existed but were eliminated prior to FY 2021.

Number of Overdue FOIA Requests, Mar 2018 - Sep 2021



Summary of progress toward strategic objective:

- Eliminated an additional 13 percent of the backlog of overdue Freedom of Information Act (FOIA) responses in FY 2021 as compared to the April 2018 baseline; reviewed and assigned for processing 6,485 FOIA requests, processed 343 expedited FOIA requests, and processed 974 applications for fee waiver.
- Issued new agencywide FOIA Policy and FOIA Procedures, delivered a week-long training for more than 250 EPA FOIA professionals and managers, issued an updated FOIA training toolkit, and provided FOIA training for all EPA staff through FedTalent.
- EPA's National Freedom of Information Office provided oversight, project management, legal counseling, training support, and cross-agency coordination for the Agency's most complex and potentially sensitive FOIA requests, including requests pertaining to the COVID-19 pandemic, Bristol Bay/Pebble Mine, the Department of Justice's August 2019 Supplemental Environmental Projects (SEP) memo, and Florida's assumption of Clean Water Act Section 404 permitting authority, and processing reform in the Office of Chemical Safety and Pollution Prevention.

Challenges:

- The pace of EPA's FOIA backlog reduction is challenged by the historically large backlog
 of overdue FOIA requests in two offices that will likely require both time and significant
 resources to reduce.
- In November 2021, EPA announced its decision to sunset FOIAonline at the end of
 calendar year 2023. Consequently, a challenge facing EPA in FY 2022 through 2024 is
 procuring, deploying, and training staff on use of a new FOIA case management and
 recordkeeping software solution.

Long-Term Performance Goal - By September 30, 2022, eliminate the backlog and meet statutory deadlines for responding to Freedom of Information Act (FOIA) requests 752.

Annual performance goal that supports this long-term performance goal:

(PM FO1) Percentage reduction in overdue FOIA requests from the April 2018 baseline.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target			No Target Established	25	50	75	Percent		
Actual			-9	16	45	58		Alaysa Tamaat	
Numerator			-224	409	1,142	1,481		Above Target	
Denominato r			2,537	2,537	2,537	2,537	Requests		

Key Takeaways:

- Reduced the backlog of overdue FOIA requests by an additional 13% this fiscal year during a global pandemic. The backlog was 1,056 at the end of FY 2021, an overall 58% reduction from the April 2018 baseline of 2,537.
- Reviewed and assigned all incoming FOIA requests on average in less than one business day.
- Reduced the average time to issue decisions on applications for expedited FOIA processing by 63% compared with FY 2020 (average of 7.77 days in FY 2021 compared to 21.06 days in FY 2020).
- The Office of General Council eliminated the backlog of more than 170 applications to process fee waiver decisions in under two weeks of receipt (974 total fee waivers processed in FY 2021).
- Reviewed and corrected over 10,000 invoices dating back to 2011 to confirm and validate fee collections, eliminate duplicate entries, and indicate fees not to be collected.
- Established a contract for FOIA document reviewers as a pilot for creating surge capacity up to three years and \$4 million.
- Enhanced FOIA training and communication tools by hosting a four-day FOIA training conference in November 2020; updating the FOIA Toolkit for EPA staff with an improved appendix of template letters to enhance and ensure consistent practices throughout EPA; and improving the Agency's FOIA SharePoint site as a one-stop place for Agency FOIA information.

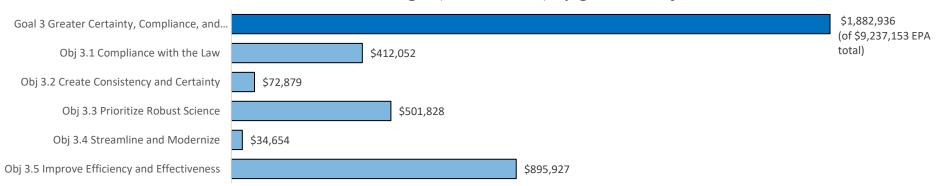
Metric Details: For purposes of this measure, overdue requests are defined as the sum of requests that are indicated in FOIA online.gov as pending beyond the statutory or agreed deadline of 20 working days, or 30 days or longer with an extension. EPA is focusing on reducing the FOIA backlog the Agency built up over the years and on improving the FOIA process which gives the public the right to make requests for federal agency records. The complexity and volume of electronic documents that must be searched, collected, and reviewed has increased over time. The Agency will ensure that it can support the timely searching and collection of electronically stored information for purposes of responding to FOIA requests and other information needs in a cost-effective and sustainable manner. This should not only help the Agency provide the public with the information requested, but also reduce the fees and lawsuits the Agency incurs from missing FOIA response deadlines. As of April 2018, there were 2,537 overdue FOIA requests in the backlog.

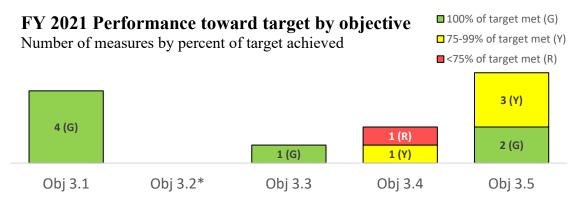
⁷⁵² As of April 2018, there were 2,537 overdue FOIA requests in the backlog. (Footnote updated from FY 2018-2022 EPA Strategic Plan published February 12,2018.)

Goal 3 at a Glance

Greater Certainty, Compliance, and Effectiveness: Increase certainty, compliance, and effectiveness by applying the rule of law to achieve more efficient and effective agency operations, service delivery, and regulatory relief.

FY 2021 Enacted Budget (in thousands) by goal and objective



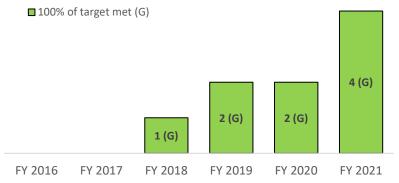


^{*}The FY 2021 APR does not include reporting on FY 2018-2022 EPA Strategic Plan objective 3.2. Consistent with OMB guidance for this transition year during which agencies are developing new strategic goals and objectives that will be reflected in the update to the strategic plan, EPA is reporting only on FY 2018-2022 EPA Strategic Plan strategic objectives that align with the current Administration's priorities.

Objective 3.1 – Compliance with the Law: Timely enforce environmental laws to increase compliance rates and promote cleanup of contaminated sites through the use of all of EPA's compliance assurance tools, especially enforcement actions to address environmental violations.

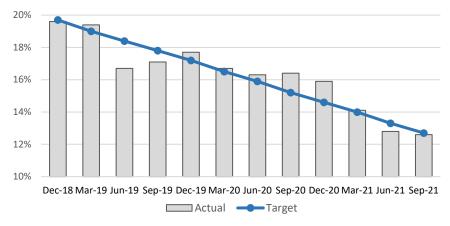
Performance toward target over time

Number of measures by percent of target achieved



Counts are of measures that exist in FY 2021. Chart does not include measures that previously existed but were eliminated prior to FY 2021.

Percentage of NPDES Permittees in Significant Noncompliance with their Permit Limits, Dec 2018 - Sep 2021



Summary of progress toward strategic objective:

- Issued three memoranda on steps to incorporate environmental justice in EPA civil, criminal, and cleanup enforcement, and one to promote use of all appropriate injunctive relief tools in civil settlements to ensure environmental laws and policies deliver benefits to all individuals and communities. (See https://www.epa.gov/enforcement/environmental-justice-enforcement-and-compliance-assurance-initiative.)
- Supported Compliance Advisors (aka Circuit Riders) to assist and train about 100 small public water systems and 50 wastewater treatment facilities in areas with environmental justice concerns.
- Developed an innovative enforcement and compliance approach for the American Innovation and Manufacturing (AIM) Act rule published October 5, 2021 to phase down the use of hydrofluorocarbons (HFCs) and protect the climate by detecting, deterring, and disrupting any attempt to illegally import, produce, or use HFCs.
- Issued 457 actions to stop the importation of unregistered or misbranded products making false claims of effectiveness against COVID-19. Worked with Customs and Border Protection as part of a COVID-19 Fraud Initiative, with four defendants sentenced for violating the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).
- Civil actions resulted in \$8.47 billion in injunctive relief, \$1.06 billion in penalties, 285 million lbs of pollutants reduced, and 7.58 billion lbs of waste properly managed. Criminal cases secured \$22 million in penalties, 28 years of incarceration, and charges against 105 defendants. Oversaw open consent decrees with over \$78 billion of injunctive relief.
- National Initiative Accomplishments:
 - o *Clean Water:* Reduced the Clean Water Act National Pollutant Discharge Elimination System (NPDES) significant noncompliance rate from 16.4% to 12.6%.
- o Stopping Aftermarket Defeat Devices for Vehicles and Engines: Resolved 51 tampering and aftermarket defeat device cases, a 37% increase from FY 2020.
- o Safe Drinking Water: Evaluated 10% of Large Systems for compliance through inspections and/or off-site desk audits. Trained and credentialed more than 60 inspectors nationwide.

Challenges:

- COVID-19 has adversely affected many of EPA's enforcement activities.
- Despite continued efforts, in FY 2021, ~21 million Americans consumed water provided by a Community Water System with at least one health-based violation and ~3,100 systems violated one or more health-based drinking water standards at some point during the year.
- EPA continues to identify state data issues (e.g., definition, entry, completeness) and issues with transferring data from state to EPA systems.

Long-Term Performance Goal - By September 30, 2022, reduce the average time from violation identification to correction 753.

Annual performance goals that support this long-term performance goal:

(PM 444) Percentage of EPA inspection reports timely completed and sent within 70 days of inspection.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target						75	Domoont		
Actual					83	85	Percent	Alarra Tanant	
Numerator					4,177	1,940	D	Above Target	
Denominator					5,037	2,287	Reports		

Key Takeaways:

• Ongoing cooperation between EPA headquarters and regional offices continues to ensure that inspection reports completed by EPA are sent to facilities within 70 calendar days of an inspection.

Metric Details: This measure tracks the percentage of inspection reports completed by EPA and sent to the facility within 70 calendar days of an inspection. Improving the timeliness of these activities allows the facility to more quickly address compliance issues. The 75% goal recognizes that it may not always be possible or appropriate to provide an inspection report within 70 days because of the nature and complexity of the compliance and enforcement program. The baseline for this measure is 46% at the beginning of FY 2019.

(PM 436) Number of open civil judicial cases more than 2.5 years old without a complaint filed.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	_
Target				129	120	99	Coses	Dolovy Torract	111
Actual				94	74	66	Cases	Below Target	

Key Takeaways:

• Ongoing, close cooperation between EPA headquarters, regional offices, and the Department of Justice (DOJ) continues to ensure the most challenging cases move toward resolution at an appropriate speed, more quickly returning violators to compliance and supporting increases in pounds of pollutants reduced and pounds of waste managed. EPA headquarters, regional offices, and DOJ are also collaborating on best practices to ensure timely conclusion of cases.

Metric Details: This measure represents the number of open civil judicial cases (excluding Superfund, bankruptcy, collection action, and access order cases) that are more than 2.5 years old without a complaint filed. The average time from referral to complaint for a complaint filed between FY 2013 and FY 2017 was 2.5 years. The baseline for this measure is 129 cases that were more than 2.5 years old without a complaint filed as of June 30, 2018.

⁷⁵³ As a proxy, EPA is measuring the number of all referred no complaint filed (RNCF) civil judicial cases that are more than 2.5 years old. EPA is working in close cooperation with the U.S. Department of Justice to ensure that cases move toward resolution at an appropriate speed in order to more quickly return violators to compliance. (Footnote updated from *FY 2018-2022 EPA Strategic Plan* published February 12, 2018.)

Long-Term Performance Goal - By September 30, 2022, increase the environmental law compliance rate⁷⁵⁴.

Annual performance goal that supports this long-term performance goal:

(PM 446) Quarterly Percentage of Clean Water Act National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target						12.7	D4		
Actual			20.3	17.1	16.4	12.6	Percent	D-1 T4	
Numerator			8,310	7,015	6,941	5,330	D:44	Below Target	
Denominator			40,944	41,085	42,334	42,429	Permittees		

Key Takeaways:

- Reduced the NPDES significant noncompliance (SNC) rate to 12.6% from the FY 2018 baseline of 20.3%.
- This success is the result of an all-in effort with EPA and states. EPA and each NPDES-authorized state meet every quarter to discuss the state's SNC rate as well as high-priority SNC cases and ways to resolve them.
- Worked closely with selected states with significant data completeness problems to resolve data issues that produce SNC cases, and developed compliance assistance resources such as a webinar series for permittees.

Metric Details: This measure tracks the NPDES SNC/Category 1 noncompliance rate among individually permitted major and non-major (minor) NPDES permittees during the last quarter of the fiscal year. NPDES SNC/Category 1 noncompliance identifies a specific level of violation, based on duration, severity, and type of violation, and is assessed quarterly. The numerator counts major and minor permittees that were in SNC/Category 1 noncompliance during the last quarter of the fiscal year. The denominator includes all active individually-permitted NPDES permittees (except permittees for which there is insufficient permit data/compliance tracking status in ICIS-NPDES for the data system to evaluate SNC status). The FY 2018 baseline of 20.3% represents an average based on four quarters of data.

Other Core Work supporting Objective 3.1

Annual performance goal:

(PM 434) Millions of pounds of pollutants and waste reduced, treated, or eliminated through concluded enforcement actions.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target			325	325	325	325	Millions of	A1 T4	
Actual	62,223	461	810	347	2,058	7,864	Pounds	Above Target	

⁷⁵⁴ This concept will be piloted by focusing initially on decreasing the percentage of Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits. (Footnote updated from *FY 2018-2022 EPA Strategic Plan* published February 12, 2018.)

GOAL 3: Greater Certainty, Compliance, and Effectiveness

Key Takeaways:

- A settlement resolving a Resource Conservation and Recovery Act case with US Magnesium resulted in a reduction of more than 7 billion pounds of hazardous waste, accounting for over 90% of the total in FY 2021.
- Targets for this measure are estimates based on cases in development and past results. Results in any given year are dependent on actual case outcomes, which are variable and difficult to predict. Annual totals are often influenced by a few large cases.

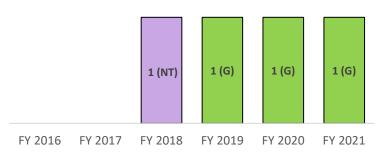
Metric Details: This measure combines estimated pounds of air, water, hazardous and non-hazardous waste, and toxics/pesticides pollutants reduced, treated, or eliminated through concluded enforcement actions. Prior to FY 2018, pounds of pollutants reduced, treated, or eliminated for different media were tracked using separate measures.

Objective 3.3 – Prioritize Robust Science: Refocus the EPA's robust research and scientific analysis to inform policy making.

Performance toward target over time

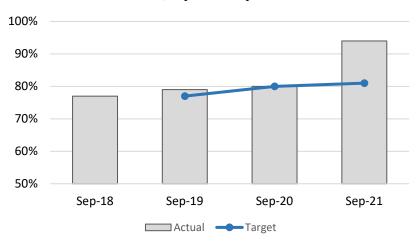
Number of measures by percent of target achieved

- 100% of target met (G)
- No target (NT)



Counts are of measures that exist in FY 2021. Chart does not include measures that previously existed but were eliminated prior to FY 2021.

Percentage of Research Products Meeting Customer Needs, Sep 2018 - Sep 2021



Summary of progress toward strategic objective:

• The FY 2021 customer satisfaction survey found that 93% of products delivered by EPA's Office of Research and Development (ORD) met partner needs (see graph at lower left).

Challenges:

- The COVID-19 pandemic has forced most of the ORD workforce into full-time telework in order to protect the health and safety of staff members. This has resulted in a slowdown of certain portions of ORD's in-lab research. ORD is continuing to evaluate the risks posed by COVID-19 in order to fulfil its research obligations. Despite this challenge, in FY 2021, 82% of ORD's regional labs met the sample analysis timeliness target (each Regional Lab sets its own target that is greater than or equal to 80% each month). These services directly support the work of EPA programs and local, state, and tribal agencies. Timeliness is a key factor in measuring laboratory efficiency.
- ORD faces a challenge in sustaining a suitably trained and skilled workforce. As of October 2021, 25.7% of ORD career staff are retirement eligible. ORD continually works to improve hiring efficiencies and implement leadership succession planning.
- ORD's work is threatened by aging equipment and facility infrastructure. In FY 2020, ORD stood up a new organization, the Research Support and Compliance Division (RSCD), to mitigate infrastructure and facility risks. Throughout FY 2021 RSCD has led repair and improvement projects to address aging infrastructure concerns and their impact on research.

Long-Term Performance Goal - By September 30, 2022, increase the percentage of research products meeting customer needs⁷⁵⁵.

Annual performance goal that supports this long-term performance goal:

(PM RD1) Percentage of Office of Research and Development (ORD) research products meeting partner needs.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	_
Target			No Target Established	77	80	81	Percent		ıΠ
Actual			77	79	80	94		Above Target	
Numerator			171	154	120	60	Products		
Denominator			222	196	150	64	Products		

Key Takeaways:

- Products evaluated in FY 2021 that met customer needs included: an updated version of EPA's Computational Toxicology (CompTox) Chemicals Dashboard, which integrates available information to help decision-makers and scientists quickly and efficiently evaluate thousands of chemicals; a series of scientific and regulatory support products developed to support EPA's regulatory air dispersion model AERMOD; and products that contributed to the development of EPA's Toxicity Forecaster (ToxCast), a research project to identify and prioritize potentially toxic chemicals using rapid, automated tests called *in vitro* assays.
- There has been a downward trend in the number of products being evaluated from FY 2018 through FY 2021. This trend is due to several factors including the refinement of eligibility criteria for ORD products being evaluated, specific drivers within the current ORD Strategic Research Action Plan (StRAP), and the impacts that COVID-19 has had on product research and development.

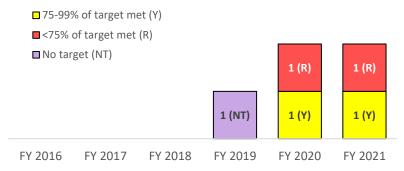
Metric Details: Partner satisfaction is evaluated through a robust survey process. The annual survey engages key users of ORD products. Survey respondents evaluate the scientific rigor of research products (quality), product relevance (usability), and timeliness of product delivery. Each year, 50 products are randomly selected from the universe of products identified as delivered during the previous fiscal year in the Research Approval Planning Implementation Dashboard RAPID to be the focus of the survey. Respondent assessments of the 50 products are extrapolated to the total universe of products to determine the numerator. The denominator is the universe of products (64 in FY 2021). The FY 2021 survey was provided to 250 federal and 64 non-federal respondents and had a 66% response rate. The survey results are estimated at a 90% confidence interval of ±10 products.

⁷⁵⁵ Measure text updated from "By September 30, 2022, increase the number of research products meeting customer needs." (Footnote updated from *FY 2018-2022 EPA Strategic Plan* published February 12, 2018.)

Objective 3.4 – Streamline and Modernize: Issue permits more quickly and modernize our permitting and reporting systems.

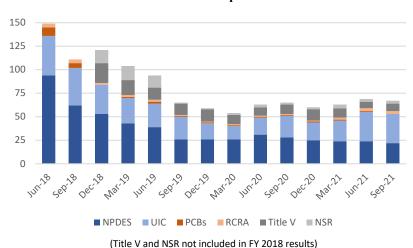
Performance toward target over time

Number of measures by percent of target achieved



Counts are of measures that exist in FY 2021. Chart does not include measures that previously existed but were eliminated prior to FY 2021.

Number of New Permit Applications in Backlog Jun 2018 - Sep 2021



Summary of progress toward strategic objective:

- Missed FY 2021 targets but sustained progress from previous years. New permit backlog is down 65% since June 2018, and existing permit backlog is down 34% since May 2019.
- Launched agencywide community of practice for environmental justice and civil rights in permit decisions, to promote more equitable outcomes in overburdened communities.
- Issued complex Clean Water Act National Pollutant Discharge Elimination System (NPDES) permits by resolving issues related to per- and polyfluoroalkyl substances (PFAS) (nine permits); Endangered Species Act approvals (six permits); Total Maximum Daily Loads (nine permits); and state consultation on federal dam projects (four permits). EPA Region 1 issued general permits for small wastewater treatment plants and aquaculture facilities, which will cover 40 and 11 backlogged permits, respectively. These efforts will also help prevent future permits from becoming backlogged.
- Provided training and technical assistance for NPDES permit writers on whole effluent toxicity, stormwater, combined sewer overflows (CSOs), and nutrients.
- The Underground Injection Control (UIC) Program continued its efforts to streamline the permit process and made sustained success in Class III (injection wells). The Program created checklists to encourage complete applications and expedite EPA review, and a comment response library for collaboration among EPA Regions. The Program also provided support to EPA Regions 3 and 9 for processing large numbers of comments received on draft permits. This support has greatly expedited comment response.
- Improved the Exchange Network Grants process by making significant changes to the FY 2021 Solicitation Notice: removed confusing and redundant language; focused opportunities into three areas; and updated the evaluation criteria to align to the Agency's Digital Strategy. Also streamlined application processing and award timeframes by 40%.

Challenges:

- Some NPDES permits are delayed due to missing information from permittees, extended public notice, and highly complex permitting issues.
- Some UIC permits are delayed due to the tribal consultation process, large volume of public comments, complicated sites, loss of experienced personnel, and delayed responses from permittees. In addition, the six-month timeframe is challenging for UIC Class I, III, V, and VI permits, which are complex due to different levels of engineering, subsurface geologic complexity, and detail in the information needed to make permitting decisions.
- All remaining backlogged Clean Air Act (CAA) New Source Review (NSR) permits are delayed due to environmental reviews from other federal agencies.
- Several CAA Title V operating permits are backlogged due to facilities either not withdrawing applications as expected, or altering their applications (ultimately changing the processing timeline).

Long-Term Performance Goal - By September 30, 2022, reach all permitting-related decisions within six months 756.

Annual performance goals that support this long-term performance goal:

(PM PE2) Number of new permit applications in backlog.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target				No Target Established	33	24	Permits	Below Target	
Actual			111	65	65	67			

Key Takeaways:

- Missed target due to a range of factors, including delayed information from permittees, complicated sites, emerging contaminants, large volume of public comments, loss of experienced personnel, and environmental reviews from other federal agencies. In addition, the six-month timeframe is challenging for certain types of complex permits.
- EPA's headquarters and regional offices worked closely to resolve policy issues affecting permit issuance and train permitting staff.
- Eliminated the backlog of new Polychlorinated Biphenyls (PCB) permit applications by issuing a permit to a facility that had been operating under interim status for more than 30 years.

Metric Details: This measure tracks the sum of new permit applications that are over six months old (for NPDES, UIC, Resource Conservation and Recovery Act [RCRA] and Polychlorinated Biphenyls [PCBs]) and complete NSR and new Title V permit applications that have been pending for longer than the statutory timeframes (12 and 18 months, respectively). The time for a permitting-related decision is calculated from the date of receipt of a permit application (or the receipt of a complete application for NSR and Title V) to the date of a permit decision. The baseline for this measure is 149 new permit applications in backlog as of June 30, 2018. The baseline and FY 2018 actual do not include NSR or Title V permits. This measure tracks progress toward a FY 2020-2021 Agency Priority Goal (APG).

(PM PE3) Number of existing permit applications in backlog.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	7
Target					313	256	Permits	Below Target	
Actual				417	384	318	Permis	Below Target	

Key Takeaways:

• Missed target due to the NPDES workload in EPA Region 1, which has 60% of the agencywide backlog of existing permit applications due to two states without delegated programs for NPDES permits. Region 1 met its internal target to make 36 permit decisions and issued a general permit for small wastewater treatment plants under which 40 of the current backlogged facilities are eligible for coverage.

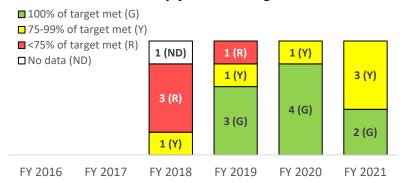
Metric Details: This measure tracks the sum of: (1) existing NPDES, RCRA and PCBs permits that have passed their expiration date and are awaiting reissuance; (2) existing UIC permits that have passed their expiration date and have an application that is over six months old; and (3) existing Title V permits that have passed their expiration date and have a complete application that has been pending for longer than the statutory timeframe (18 months). The baseline for this measure is 479 existing permits in backlog as of May 31, 2019. This measure tracks progress toward a FY 2020-2021 APG.

⁷⁵⁶ Baseline is 149 new permit applications in backlog as of June 30, 2018, and 479 existing permits in backlog as of May 31, 2019. (No footnote in FY 2018-2022 EPA Strategic Plan.)

Objective 3.5 – Improve Efficiency and Effectiveness: Provide proper leadership and internal operations management to ensure that the Agency is fulfilling its mission.

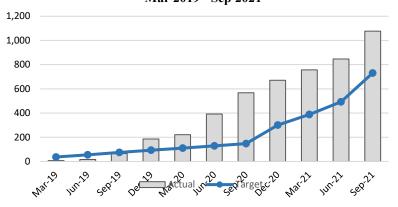
Performance toward target over time

Number of measures by percent of target achieved



Counts are of measures that exist in FY 2021. Chart does not include measures that previously existed but were eliminated prior to FY 2021.

Cumulative Number of Operational Processes Improved, Mar 2019 - Sep 2021



Summary of progress toward strategic objective:

- Developed agencywide COVID-19 guidance, workforce safety plan, FAQs, and a mechanism to collect employee vaccination attestation.
- Finalized the 2021-2025 Grants Management Plan and incorporated equity and environmental justice considerations into the grants process. Deployed Next Generation Grants System.
- Identified and assessed cybersecurity tools, gaps, and redundancies to enable improvements to enterprise security environment.
- Deployed the user friendly, automated employee performance management system USA Performance and implemented robust training for all employees.
- Updated certificates on 13,000+ USAccess Homeland Security Presidential Directive (HSPD)-12 compliant Personal Identify Verification (PIV) cards, maintaining secured and assured logical access to Agency systems and physical access to EPA facilities.
- Developed EPA's first set of Evidence Act deliverables, including Full Draft of the Learning Agenda, Capacity Assessment, FY 2023 Annual Evaluation Plan, and a Policy for Evaluations and Other Evidence-Building Activities incorporating scientific integrity principles.
- Leveraged continuous improvement efforts which resulted in improving 507 Agency processes and implementing 4,172 employee ideas.
- Received a clean opinion on EPA's Consolidated Financial Statements for the 22nd consecutive year.
- Continued modernizing Agency financial management systems and tools which resulted in the increased use of the Invoice Processing Platform to process 91% of contract invoices and enabling the Agency to project payroll within 1% of FY 2021 need.

Challenges:

- Faced challenges in space release projects as a result of the ongoing COVID-19 pandemic, which resulted in delays of several major planned space releases and prevented EPA from meeting its annual performance target.
- Despite missing the FY 2021 performance target, EPA continued to show progress in contract actions awarded within Procurement Action Lead Time (PALT) standards. However, a number of complex contract actions that carry longer PALT timeframes remain.
- Maintaining legacy financial data in perpetuity adds cost and complexity to system and reporting modernization and upgrade projects, and sometimes requires specialized staff training.

Long-Term Performance Goal - By September 30, 2022, reduce unused office and warehouse space by 850,641 square feet 757.

Annual performance goal that supports this long-term performance goal:

(PM FA1) Reduction in EPA Space (sq. ft. owned and leased).

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	_
Target			241,000	163,626	100,821	26,017	Sayana East	Above Target	
Actual			149,278	128,150	116,425	22,455	Square reet	Above Target	



Key Takeaways:

- Faced challenges in this area as a result of the ongoing COVID-19 pandemic, primarily construction delays, which delayed several major planned space releases. Additionally, EPA faced a steep learning curve in disposing of EPA properties with residual contaminants, which resulted in delays. However, EPA's learning in this area will support future space release efforts.
- Despite these challenges, EPA continues to make progress in this area and will release the Potomac Yards Facility in Virginia in Spring 2023, which will enable EPA to meet the long-term performance goal to release 850,641 square feet.

Metric Details: This measure tracks square feet of office and warehouse space released with data collected from EPA facility manager notifications, and reports generated when there is a modification to an Occupancy Agreement. Space consolidation efforts will result in EPA becoming a more efficient and effective Agency by reducing lease, utility, security and other facility management costs, which will enable the Agency to direct resources to core environmental work.

⁷⁵⁷ Baseline is 5,264,846 square feet as of FY 2017.

Long-Term Performance Goal - By September 30, 2022, reduce procurement processing times by achieving 100% of procurement action lead times (PALT)⁷⁵⁸.

Annual performance goal that supports this long-term performance goal:

(PM PR1) Percentage of contract actions processed within the Procurement Action Lead Time (PALT) Standards.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target			SA: 75 CP: 65 FAA: 80	85	90	95	Percent		
Actual			SA: 70 CP: 88 FAA: 76	85	90	91	reicent	Above Target	П
Numerator			SA:704 CP: 21 FAA: 3,038	9,269	10,575	11,230	Actions		
Denominator			SA: 1,007 CP: 24 FAA: 4,002	10,906	11,719	12,291	Actions		

Key Takeaways:

- EPA has made significant progress in reducing the number of contract actions that exceed PALT, primarily through the implementation of internal controls to screen contract actions for completeness prior to acceptance, putting in place a process to monitor pending actions, and additional training for the acquisition community across EPA.
- In the three years that EPA has been tracking this measure, the annual number of contract actions processed within PALT has increased by over 20% while the annual overall number of contract actions only increased by 13% due to the implementation of more efficient procurement request (PR) management strategies; EPA processed nearly 2,000 more actions within PALT in FY 2021 than in FY 2019.
- EPA is approaching a steady state after significantly reducing the PALT backlog where there are now diminishing returns; this recognizes that certain complex contract actions may require more review and processing time than the majority of actions.

Metric Details: This measure tracks the timeliness of the Agency's processing of contract actions with data collected from EPA's Acquisition System (EAS). Timeliness is measured in processing days from the date the PR is released in EAS to the date the contract is awarded. PALT Standards are outlined in Section 7.1.1 of the EPA Acquisition Guide. The purpose of these efforts is to make EPA a more efficient and effective Agency by reducing processing time and costs. Beginning in FY 2019, EPA has reported results for all acquisition categories against the September 30, 2018 baseline of 77% for all contract actions awarded within PALT. FY 2018 actuals were reported against a January 1, 2018 baseline of: 47% for Simplified Acquisitions (SA); 65% for Competitive Proposals (CP); and 67% for Funding and Administrative Actions (FAA).

⁷⁵⁸ Baseline, as of September 30, 2018 is 77% for all contract actions awarded within PALT. (Footnote updated from *FY 2018-2022 EPA Strategic Plan* published February 12, 2018.)

Long-Term Performance Goal - By September 30, 2022, improve 250 operational processes.

Annual performance goal that supports this long-term performance goal:

(PM OP1) Number of operational processes improved.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target			25	50	72	500	Operational	Above Target	
Actual			N/A	66	502	507	Processes	Above Target	

Key Takeaways:

- The Agency established a new best by improving 507 processes in FY 2021 across its regions and programs.
- Improvements were made through various continuous improvement activities and problem-solving tools regularly used by front line staff and management.
- The process improvements helped drive innovation, improve operations, create a better customer experience, empower frontline staff and leverage leadership support.
- Staff and managers shared many improvements throughout the Agency, which helped teams in different offices increase their knowledge and benchmark and streamline their own processes.

Metric Details: EPA is applying Lean principles to improve the efficiency and cost effectiveness of its operations. An operational process is a sequence of activities that results in the delivery of a service. A process improvement is counted if it is at least a 25% improvement over the baseline. Process improvements result from a variety of tools (e.g., visual management, A3s, kaizen events, other problem-solving activities) and include standard work (e.g., standard operating procedures) and use of visual management (visible placement of information and indicators that quickly convey/signal if a process is under control or abnormal, e.g., flow boards, performance boards, bowling charts) to assure sustainment of the improvement.

Long-Term Performance Goal - By September 30, 2022, increase enterprise adoption of shared services by four 759.

Annual performance goals that support this long-term performance goal:

(PM CF1) Number of administrative shared services.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target			6	7	8	9	Shared	Above Target	11111111
Actual	4	4	4	7	8	9	Services	Above Target	

Key Takeaways:

• EPA fully implemented USA Performance, the U.S. Office of Personnel Management's Employee Performance Management Shared Service in October 2020.

• USA Performance annually maintains over 14,000 performance plans electronically for EPA employees with increased automation, transparency, accountability, and availability over the previous paper form processes. Further, USA Performance utilizes secure, authenticated digital signatures, has built-in reporting features, and ensures compliance with Office of Personnel Management (OPM)-recommended and required Federal regulations.

⁷⁵⁹ Baseline is four administrative systems/operations shared services in FY 2017. (Footnote updated from FY 2018-2022 EPA Strategic Plan published February 12, 2018.)

Metric Details: EPA will adopt federal shared services when supported by business case analyses. Federal shared services are shared across multiple federal agencies. Enterprise adoption of shared services ensures consistency and scalability in tools and services, enabling the Agency to standardize internal operational processes, control costs, and improve data quality. In FY 2019, EPA refined the scope of this measure to include only systems or services where federal shared service providers (FSSPs) were adopted, and to no longer include internal agencywide shared services. This revision resulted in a change to the baseline of existing shared services from five to four. The four administrative shared services in place as of the end of FY 2017 were: Human Resources Line of Business (Interior Business Center [IBC]/Federal Personnel and Payroll System [FPPS]), Payroll (IBC/PeoplePlus), Travel (Concur), and Financial Management (CGI Federal Inc./Compass Financials).

(PM CF2) Number of Agency administrative systems and system interfaces.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	1
Target			24	22	22	19	Systems and	Below Target	
Actual		30	30	30	24	21	Interfaces		

Key Takeaways:

- EPA eliminated three administrative systems in FY 2021: two LotusNotes databases for Unliquidated Obligations (ULOs) and for Open Commitments and Recertification, and the Federal Managers Financial Integrity Act (FMFIA) tracking system. The systems moved to more cost-efficient oversight software, providing additional capability at no additional cost.
- EPA is on track to meet its overall target to eliminate 13 administrative systems by FY 2022.

Metric Details: This measure tracks the number of administrative systems or system interfaces EPA actively operates. Administrative systems support the execution of the Agency's administrative functions such as accounting, grants management, and contracts management. System interfaces are connections among administrative systems where data are shared. Reducing the number of administrative systems or system interfaces has a positive impact on streamlining operational processes and drives the integration of financial transactions across multiple administrative systems, reducing manual entry, and improving data quality. EPA is working to reduce the number of administrative systems and system interfaces to more easily input and access data and standardize reporting as payment processing is moved to a federal shared service provider. In FY 2021, EPA retroactively added an administrative system that was not included in the original universe. FY 2017-2020 actuals have been adjusted to include the additional system.

Environmental Protection Agency FY 2023 Annual Performance Plan and Congressional Justification

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Coordination with Other Federal Agencies

Air and Radiation Programs

National Ambient Air Quality Standards (NAAQS) Implementation

EPA cooperates with other agencies to achieve goals related to ground level ozone and particulate matter (PM), and to ensure the actions of other agencies are compatible with state plans for attaining and maintaining the National Ambient Air Quality Standards (NAAQS). The Agency works closely with the U.S. Department of Agriculture (USDA), Department of the Interior (DOI), and Department of Defense (DOD) on issues such as prescribed burning at silviculture and agricultural operations. EPA, the U.S. Department of Transportation (DOT), and the U.S. Army Corps of Engineers (USACE) also work with state and local agencies to integrate transportation and air quality plans, reduce traffic congestion, and promote livable communities.

Air Quality in the Agricultural Sector

To improve EPA's understanding of environmental issues in the agricultural sector, the Agency works with USDA and others to improve air quality while supporting sustainable agriculture. The collaborative approach to the agriculture sector includes scientific assessment, outreach and education, and implementation/compliance.

Regional Haze

EPA works with the National Park Service (NPS), and U.S. Forest Service (USFS) and DOI in implementing its regional haze program and operating the Interagency Monitoring of Protected Visual Environments (IMPROVE) visibility monitoring network. The operation and analysis of data produced by this air monitoring system is an example of the close coordination of efforts between EPA and state and tribal governments.

Air Quality Assessment, Modeling, and Forecasting

For pollution assessments and transport, EPA works with the National Aeronautics and Space Administration (NASA) on technology transfer using satellite imagery. EPA further distributes NASA satellite products and National Oceanographic and Atmospheric Administration (NOAA) air quality forecast products to states, local agencies, and tribes to provide a better understanding of daily air quality and to assist with air quality forecasting. EPA works with NASA to develop a better understanding of PM formation using satellite data. EPA also works with the Department of the Army on advancing emission measurement technology and with NOAA for meteorological support for our modeling and monitoring efforts. EPA collects real-time ozone and PM measurements from state and local agencies, which are used by both NOAA and EPA to improve and verify Air Quality Forecast models.

EPA's AirNow Program (the national real-time Air Quality Index reporting and forecasting system) works with the National Weather Service (NWS) to coordinate NOAA air quality forecast

guidance with state and local agencies for air quality forecasting efforts and to render the NOAA model output in EPA's Air Quality Index (AQI), which helps people determine appropriate air quality protective behaviors. In wildfire situations, EPA and USFS work closely with states to deploy monitors and report monitoring information and other conditions on *AirNow*. The *AirNow* Program also collaborates with NPS and USFS in collecting air quality monitoring observations, in addition to over 130 state, local, and tribal air agency observations, and with NASA in a project to incorporate satellite data with air quality observations.

EPA, USDA, and DOI established a collaborative framework to address issues pertaining to wildland fire and air quality. The agreement recognizes the key roles of each agency, as well as opportunities for collaboration. For example, the partnership explains that the agencies seek to reduce the impact of emissions from wildfires, especially catastrophic wildfires, and the impact of those emissions on air quality. In addition, the partnership highlights opportunities for enhancing coordination among the agencies through information sharing and consultation, collaboration on tools and information resources, and working together to collaborate with state and other partners, among others on strategic goals.

Mobile Sources

EPA works with DOT's National Highway Traffic Safety Administration (NHTSA) on the coordinated national program establishing standards to improve fuel efficiency for light-duty vehicles. Specifically, EPA, in coordination with DOT's fuel economy and fuel consumption standards programs, implements vehicle and commercial truck greenhouse gas standards.

To address criteria pollutant emissions from marine and aircraft sources, EPA works collaboratively with the International Maritime Organization (IMO) and International Civil Aviation Organization (ICAO), as well as with other federal agencies, such as the U.S. Coast Guard (USCG) and the Federal Aviation Administration (FAA). EPA also collaborates with the USCG in the implementation of Emission Control Area (ECA) around the U.S., and with Mexico and Canada in the North American Commission for Environmental Cooperation (CEC) to evaluate the benefits of establishing a Mexican ECA.

To better understand the sources and causes of mobile source pollution, EPA works with the Department of Energy (DOE) and DOT to fund applied research projects including transportation modeling projects. EPA also works closely with DOE on refinery cost modeling analyses to support clean fuel programs, and coordinates with DOE regarding fuel supply during emergency situations.

For mobile sources program outreach, the Agency participates in a collaborative effort with DOT's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), and the Centers for Disease Control and Prevention (CDC) to educate the public and communities about the impacts of transportation choices on traffic congestion, air quality, climate change, and human health. These partnerships can involve policy assessments and toxic emission reduction strategies in different regions of the country. EPA works with DOE, DOT, and other agencies, as needed, on the requirements of the Energy Policy Act of 2005 and the Energy Independence and Security Act

of 2007, such as the Renewable Fuel Standard. EPA also has worked with other agencies on biofuel topics through the Biomass Research and Development Institute.

To develop air pollutant emission factors and emission estimation algorithms for military aircraft, ground equipment, and vehicles, EPA partners with the DOD. This partnership provides for the joint undertaking of air-monitoring/emission factor research and regulatory implementation.

Air Toxics

EPA works closely with other health agencies such as the CDC, National Institute of Environmental Health Sciences (NIEHS), and National Institute for Occupational Safety and Health (NIOSH) on health risk characterization for both toxic and criteria air pollutants. The Agency also contributes air quality data to CDC's Environmental Public Health Tracking Program, which is made publicly available and used by various public health agencies.

Addressing Transboundary Air Pollution

In developing regional and international air quality projects, and in working on regional agreements, EPA works with the Department of State (DOS), NOAA, NASA, DOE, USDA, U.S. Agency for International Development (USAID), and the Office of Management and Budget (OMB), and with regional organizations. In addition, EPA has partnered with other organizations and countries worldwide, including the United Nations Environment Programme (UNEP), the European Union (EU), the Organization for Economic Cooperation and Development (OECD), the United Nations Economic Commission for Europe (UNECE), CEC, Canada, Mexico, China, and Japan. EPA also partners with environment and public health officials and provides technical assistance through UNEP to facilitate the development of air quality management strategies to other major emitters and/or to key regional or sub-regional groupings of countries.

Stratospheric Ozone

EPA works closely with DOS and other federal agencies in international negotiations among Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, with the goal of protecting the ozone layer and through managing ozone depleting substances (ODS) it controls. EPA also supports several multilateral environmental agreements to simultaneously protect the ozone layer and climate system working closely with the DOS and other federal agencies, including but not limited to the Office of Science Technology and Policy (OSTP), Council on Environmental Quality (CEQ), Department of Commerce (DOC), OMB, USDA NOAA, and NASA.

EPA works with other agencies, including the Office of the United States Trade Representative (USTR) and DOC, to analyze potential trade implications in stratospheric protection regulations that affect imports and exports. EPA has coordinated efforts with the Department of Justice (DOJ), Department of Homeland Security (DHS), Department of Treasury (U.S. Treasury), and other agencies to curb the illegal importation of ODS.

Radiation and Radiation Preparedness and Response

EPA works primarily with the Nuclear Regulatory Commission (NRC), DOE, and DHS on multiple radiation-related issues. EPA has ongoing planning and guidance discussions with DHS on emergency response activities, including exercises responding to nuclear related incidents. As the regulator of DOE's Waste Isolation Pilot Plant (WIPP), EPA is charged with coordinating with DOE to ensure the facility is operating in compliance with EPA regulations. EPA is a member of the Interagency Radiation Source Protection and Security Task Force, established in the Energy Policy Act, to improve the security of domestic radioactive sources. EPA also is a working member of the interagency Nuclear Government Coordinating Council (NGCC), which coordinates across government and the private sector on issues related to security, communications and emergency management within the nuclear sector.

For emergency preparedness, EPA coordinates with other federal agencies through the Federal Radiological Preparedness Coordinating Committee and the Advisory Team for Environment, Food and Health which provides federal scientific advice and recommendations to state and local decision makers, such as governors and mayors, during a radiological emergency. EPA participates in planning and implementing exercises including radiological anti-terrorism activities with the Department of Health and Human Services (DHHS), NRC, DOE, DOD, and DHS.

EPA is a charter member and co-chairs the Interagency Steering Committee on Radiation Standards (ISCORS), which was created at the direction of Congress. Through its activities, member agencies are kept informed of cross-cutting issues related to radiation protection, radioactive waste management, and emergency preparedness and response. ISCORS also helps coordinate U.S. responses to radiation-related issues internationally.

During radiological emergencies, EPA works with expert members of the International Atomic Energy Agency (IAEA). EPA also works with OECD's Nuclear Energy Agency (NEA) on two committees: the Radioactive Waste Management Committee (RWMC) and the Committee on Radiation Protection and Public Health (CRPPH). Through participation on the CRPPH, EPA is successful in bringing U.S. perspectives to international radiation protection policy.

Climate Change

To carry out a diverse range of regulatory and partnership programs to help tackle the climate crisis, EPA works with a number of other federal agencies, including the Department of Housing and Urban Development (HUD), Federal Energy Regulatory Commission (FERC), DOE, USDA, DOS, USAID, DOI, and DOT.

Climate protection partnership programs, government-wide, stimulate the development and use of renewable energy technologies, energy efficient products, and other strategies that will help reduce greenhouse gas (GHG) emissions. The effort is led by EPA and DOE with significant involvement from the USDA, HUD, and the National Institute of Standards and Technology (NIST).

The Global Methane Initiative (GMI) is a U.S.-led, international public-private partnership that brings together over 40 partner governments and over 1,000 public and private sector organizations

to advance methane recovery and use methane as a clean energy source. EPA works with DOS on the GMI, building on the success of EPA's domestic methane programs and focusing on advancing methane reductions from agriculture, coal mines, landfills, oil and gas systems, and municipal wastewater.

EPA also will support DOS as the technical lead in developing projections and compiling information on GHG mitigation policies and measures as part of the upcoming U.S. Biennial Report and National Communication as required by the U.N. Framework Convention on Climate Change. EPA will support the State Department and National Science Foundation with applying applicable goals and GHG mitigation policies in the review of environmental evaluations for non-Governmental activities in Antarctica consistent with Antarctica Treaty Commission commitments.

Research Supporting the Air and Radiation Program

EPA continues to coordinate with other agencies, such as the National Institutes of Health (NIH), NOAA, DOE, USDA, and FHWA to develop sustainable approaches to manage air pollution risks.

Water Programs

Collaboration with Public and Private Partners on Water Infrastructure Preparedness, Response and Recovery

EPA coordinates with other federal agencies, primarily DHS, CDC, FDA, and DOD, on biological, chemical, and radiological contaminants of high concern, and how to detect and respond to their presence in drinking water and wastewater systems. EPA maintains a close linkage with the Federal Bureau of Investigation (FBI) and DHS, particularly with respect to ensuring the timely dissemination of threat information through existing communication networks. Additionally, throughout the pandemic, EPA worked with DHS and other federal agencies to coordinate aspects of information sharing, disseminate personal protective equipment, address shortages of treatment chemicals, provide for equipment and qualified water system operators, and recognize water system operators and associated contract personnel as critical workers.

EPA works with USACE and the Federal Emergency Management Agency (FEMA) to refine coordination processes among federal partners engaged in providing emergency response support to the water sector, including maintaining clear roles and responsibilities under the National Disaster Recovery Framework. In addition, EPA continues to work with FEMA, USACE, and other agencies, on the Federal Interagency Floodplain Management Task Force regarding water resources and floodplain management.

As the agency in charge of water sector security, EPA works with DHS Cyber and Infrastructure Security Agency (CISA) and other government agencies on the Industrial Control System (ICS) working group to develop an ICS interagency Strategy and Implementation Plan. EPA also collaborates with CISA on various working groups and cybersecurity issues such as roles and responsibilities, ICS supply chain, cyber workforce, cybersecurity standards, and cyber response.

Drinking Water Programs

EPA and the U.S. Geological Survey (USGS) established an Interagency Agreement to coordinate activities and information exchange in the areas of unregulated contaminants occurrence, the environmental relationships affecting contaminant occurrence, protection area delineation methodology, and analytical methods. This effort improves the quality of information to support risk management decision-making at all levels of government, generates valuable new data, and eliminates potential redundancies. EPA also collaborates with HUD to develop strategies to decrease drinking water lead exposure in homes. The partnership promotes the exchange of information, leverages funding, and reviews processes to facilitate better-informed and coordinated decisions and investments.

In addition, EPA collaborates with DHHS to better understand, characterize, and manage public health risks from Contaminants of Emerging Concern (CECs), with activities spanning from assessing CDC's waterborne disease surveillance data related to *legionella* and other biofilm-related pathogens to partnering with FDA on antibiotic resistance-related issues. EPA collaborates with multiple federal agencies to address Per- and Polyfluoroalkyl Substances (PFAS) issues including DOD, DOE, USDA, FDA, DHHS, the NIH, the Consumer Product Safety Commission, the Small Business Administration (SBA), NASA, FAA, and OMB.

Infrastructure Support for Tribal Water Systems

EPA coordinates the multi-agency tribal Infrastructure Task Force (ITF), created to develop and coordinate federal activities in delivering water infrastructure, wastewater infrastructure and solid waste management services to tribal communities. The ITF is the formal mechanism for interagency coordination among EPA, DHHS's Indian Health Service (IHS), HUD, USDA, and the Bureau of Indian Affairs (BIA).

Bipartisan Infrastructure Law (BIL) / Infrastructure Investment and Jobs Act (IIJA)

Coordination work with other federal agencies also will support EPA's BIL/IIJA implementation priorities.

Sustainable Rural Drinking and Wastewater Systems

EPA and USDA work together to increase the sustainability of rural drinking water and wastewater systems to ensure the protection of public health, water quality, and sustainable communities. The two agencies facilitate coordinated funding for infrastructure projects that aid in the compliance of national drinking water and clean water regulations.

National Water Sector Workforce Development: Department of Veterans Affairs

EPA and the Departments of Education, Interior, Agriculture, and Veterans Affairs (VA) are building on existing collaborations, exploring new opportunities and actions, and identifying potential additional federal programs and partners to support the Nation's water sector professionals.

Coordination with Department of Defense on Analytical Methods for Detecting PFAS

EPA's Clean Water Act (CWA) analytical methods program is collaborating with DOD on their efforts to develop an analytical method for detecting certain PFAS compounds in wastewater.

Source Water Protection and Harmful Algal Blooms (HABs)

To combat HABs and hypoxia, the Harmful Algal Bloom and Hypoxia Research and Control Amendments Act of 2014 (HABHRCA 2014, P.L. 113-124, reauthorized through the National Integrated Drought Information System [HABHRCA 2017, Public Law 115-423]) emphasizes the mandate to advance the scientific understanding and ability to detect, predict, control, mitigate, and respond to HABs and hypoxia. This legislation established the Interagency Working Group on HABHRCA (IWG-HABHRCA). It tasked the group with coordinating and convening federal agencies to discuss HAB and hypoxia events in the U.S., and to develop action plans, reports, and assessments of these situations. The IWG-HABHRCA is co-chaired by representatives from EPA, NOAA, and the OSTP, and it is composed of the following member agencies and departments: CDC, FDA, NIEHS, USACE, USGS, BOEM, NPS, FWS, NASA, USDA, DOS, and the National Science Foundation (NSF).

2018 Farm Bill Source Water Protection Provisions

EPA collaborates with the USDA Natural Resources Conservation Service (NRCS), state and utility partners to develop implementation strategies and guidance to comply with the 2018 Farm Bill provisions. These provisions dedicate at least 10 percent of total funds available for conservation programs (with the exception of the Conservation Reserve Program) to be used for source water protection. In addition, the Agency partners with NRCS to foster collaboration at the state and local levels to identify priority source water protection areas in each state to address agriculture-related impacts to drinking water sources. EPA also is collaborating with USFS in developing strategies to implement the 2018 Farm Bill (Title VIII, Subtitle D, Section 8404) Source Water Protection provisions requiring a "Water Source Protection Program" on National Forest Service (NFS) lands. EPA is supporting USFS by fostering partnerships with state, utilities, and other water stakeholders.

Source Water Collaborative

EPA participates in the Source Water Collaborative along with USDA (NRCS, Farm Service Agency (FSA), USFS), USGS, and 25 other national organizations. The goal of the collaborative is to protect sources of drinking water by combining the strengths and tools of its member organizations. EPA provides funding to support these efforts.

Carbon Capture, Utilization, and Storage (CCUS)

EPA participates in quarterly and ad hoc meetings with the Internal Revenue Service (IRS), DOE, DOI, DOT, and DOJ to share information on carbon capture and storage developments. In addition, EPA serves as a liaison to DOE's National Risk Assessment Partnership to advance its work in developing tools to improve collective understanding of risk at CO₂ storage projects and

inform science and risk-based decision-making at geologic sequestration projects; and to explore opportunities to integrate the partnership work into EPA's Class VI permitting process. EPA also will collaborate with DOE and CEQ on several reports and other initiatives related to carbon sequestration requested by Congress, including developing a report on UIC Class VI permitting. Through the CAA §309 review program, EPA is collaborating with DOE and other agencies as needed to assist with identifying potential impacts and ways to avoid and minimize those impacts from CO₂ storage projects.

Drinking Water and Wastewater Work in Indian Country

EPA works under a five-federal agency MOU to better coordinate the federal government's efforts in providing access to safe drinking water and basic wastewater facilities for tribal communities. EPA, DOI, DHHS, USDA, and HUD work as the Federal Tribal Infrastructure Task Force (TITF) to use their combined authorities to maintain a framework to enhance interagency efficiency and coordination, and to cultivate greater cooperation in carrying out their tribal infrastructure responsibilities. Since 2007, the TITF has: maintained procedures necessary for a common understanding of the programs pertaining to funding infrastructure construction, solid waste management efforts, and technical assistance to tribes; worked together to improve the capacity of tribal communities to operate and maintain sustainable infrastructure; enhanced the efficient leveraging of funds; worked directly with tribes to promote an understanding of federal programs; identified ways to improve construction, operation, and maintenance of sustainable infrastructure; and worked to allow and facilitate the exchange of data and information amongst partners.¹

Research to Support Water Programs

While EPA is the federal agency mandated to ensure safe drinking water, other federal and non-federal entities conduct research that complements EPA's research on priority contaminants in drinking water. Cooperative research efforts have been ongoing with the American Water Works Association, Water Research Foundation, and other stakeholders to coordinate drinking water research where the private sector is conducting research in areas such as analytical methods, treatment technologies, and the development and maintenance of water resources. EPA also has worked with the USGS to evaluate performance of newly developed methods for measuring microbes in potential drinking water sources.

Interagency coordination in research also is occurring in developing sediment criteria. Here, EPA has joint research initiatives with NOAA and USGS for linking monitoring data and field study information with available toxicity data and assessment models for developing sediment criteria.

EPA also conducts studies with the USGS to monitor the occurrence of CECs. Research efforts to monitor the effects of chemical mixtures continue, increasing our understanding of wastewater effluent impacts to human and aquatic health and prioritizing future research on developing solutions for the removal of CECs in wastewater treatment operations.

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¹ For additional information, please visit: https://www.epa.gov/tribal/federal-infrastructure-task-force-improve-access-safe-drinking-water-and-basic-sanitation.

Land and Emergency Management Programs

Brownfields

EPA's Brownfields and Land Revitalization Programs partner with the NPS's River, Trails and Conservation Assistance Program to support *Groundwork USA* and individual Groundwork Trust organizations in their efforts to engage youth in brownfields redevelopment and community revitalization.

Superfund Remedial Program

The Superfund Remedial Program maintains ongoing coordination and collaboration with ATSDR, NIEHS, HUD, and USACE as well as with the Federal Mining Dialogue and the Federal Remediation Technologies Roundtable, two multi-agency consortia. Interaction with these entities enhances program implementation through activities that are mutually beneficial, such as information sharing and resource leveraging. For example, ATSDR has a statutory mandate to complete health assessments on sites listed on EPA's National Priorities List while EPA conducts site characterization and remediation. Moreover, EPA site managers work with their ATSDR counterparts to coordinate public human health messaging. For NIEHS, EPA collaborates and coordinates academic research related to contaminant toxicities, site characterization and remediation and risk communication. EPA collaborates with HUD on residential risk evaluation and mitigation, while the Agency's work with USACE spans a wide range of technical, management and acquisition support functions to implement or oversee responsible party Superfund project implementation for the remedial and removal programs. EPA's participation in the Federal Mining Dialogue has established the Agency's role in a multi-agency (e.g., DOE, DOI, etc.) partnership to address mining sites on federal and mixed ownership lands. Membership in the Federal Remediation Technologies Roundtable facilitates EPA's collaboration with multiple federal entities, such as DOD, NASA, DOT, to advance the use of innovative technologies to clean up hazardous waste contamination.

Superfund Federal Facilities Restoration and Reuse Program

EPA's Superfund Federal Facilities Restoration and Reuse Program coordinates with other Federal Agencies (OFAs); state, tribal, and local governments; and communities to implement its statutory responsibilities to ensure protective and efficient cleanup and reuse of federally contaminated land on the Federal Agency Hazardous Waste Compliance Docket and the NPL. Successful coordination requires strong partnerships and enhanced engagement by having regularly scheduled and ad hoc meetings that target and resolve critical programmatic issues, emphasize selection and implementation of protective cleanups, and recognize site reuse opportunities and successes. EPA has committed to early engagement with our partners that focus on issues with a problem-solving and action-oriented approach.

The Program also coordinates with national organizations that help to improve engagement such as the Association of State and Territorial Solid Waste Management Officials (ASTSWMO), the Interstate Technology and Regulatory Council (ITRC), and the Environmental Council of the States (ECOS). ASTSWMO has a Federal Facilities Research Center Subcommittee that promotes

and enhances state and territory involvement in the cleanup and reuse of contaminated federal facilities and fosters information exchange by and between states, territories, and OFAs. This includes identifying and researching emerging issues related to state and federal cleanup programs at federal facility sites, producing and disseminating resource documents and tools, and working with EPA and OFAs on a variety of federal facility issues and forums. Current topics of interest include addressing contaminants of emerging concern like PFAS; ensuring Applicable or Relevant and Appropriate Requirements (ARARs) are identified and implemented; coordination with civilian federal agencies; Performance-Based Contracting; and participating in the implementation and oversight of the Munitions Response Program. ITRC is a state-led coalition working to reduce barriers to the use of innovative air, water, waste, and remediation environmental technologies and processes. ITRC produces documents and training that broaden and deepen technical knowledge and expedite quality regulatory decision making while protecting human health and the environment. EPA, along with OFAs and industry representatives, works through ITRC in defining continuing research needs through its teams including on topics of relevance and benefit to federal facility sites, like PFAS, chemicals of emerging concern, and performance-based optimization of pump and treat systems.

Through the establishment of a national cleanup dialogue with the DOE and the states in coordination with ECOS, EPA supports special emphasis engagement for nuclear weapons sites, the largest and costliest portfolio of remaining federal facilities cleanup work. The Dialogue enhances ongoing working relationships in the cleanup of DOE Environmental Management sites and focuses on topics of mutual relevance and highest priority to ensure timely advancement of protective cleanups. The Dialogue exemplifies how collaboration can advance DOE sites and foster an understanding of challenges and successes nationally.

EPA also participates with OFAs and states on the Munitions Response Dialogue (MRD), partners with DOD research and development programs on munitions management and environmental restoration. Current MRD activities include EPA, DOD, Federal Land Management Agencies, and states updating and harmonizing previous munitions risk/hazard assessment methodologies. The MRD's goal is to achieve consensus on an updated munitions risk/hazard assessment methodology. EPA also co-chairs the Intergovernmental Data Quality Task Force (IDQTF) with DoD and DOE. The IDQTF works to ensure that environmental data are of known and documented quality and suitable for the intended use.

EPA actively participates in the Defense Environmental Restoration Program and Formerly Used Defense Sites (FUDS) forums hosted by the DOD. DOD's gathering of State and Federal regulators offers a unique opportunity to partner, share information, and facilitate more efficient and effective management of DoD's cleanup program. Recent forums focused on emerging issues, best practices, and lessons learned, as well as new policies and technology investments to maximize efficiencies and minimize the time it takes to complete cleanup at active Base Realignment and Closure installations and FUDS. Similar forums hosted by DOD service components provide EPA and states further opportunities for engagement, often focused on topics tailored to the unique aspects of the response programs of the Army, Navy, or Air Force.

EPA coordinates with OFAs on the Federal Mining Dialogue (FMD). The FMD is a cooperative initiative among federal environmental and land management agencies that provide a national-level forum for federal agencies to identify and discuss lessons learned and technical mining impact issues associated with the cleanup and reuse of abandoned and inactive hard rock mine and mineral processing sites across the country. EPA also engages with OFAs in the complementary Abandoned Uranium Mine Work Group, which focuses on investigation and cleanup of legacy uranium ore mining and mill tailing sites in the western U.S. Multiple program and enforcement offices participate for EPA in both venues to ensure coordinated engagement across the Agency.

RCRA Waste Minimization and Recycling: Supporting Sustainable Materials Management

Natural resource extraction and processing make up approximately 50 percent of total GHG emissions. Under RCRA, EPA provides data, information, guidelines, tools, and technical assistance on resource conservation, recycling, and resource recovery. As part of this work, EPA focuses on increasing the conservation and recovery of municipal solid waste (e.g., plastics, aluminum, paper, food waste) and industrial waste (e.g., construction and demolition materials) to advance a circular economy. EPA works closely with other federal agencies to implement EPA's 2021 National Recycling Strategy, the 2020 Save our Seas Act 2.0, and the 2021 Infrastructure Investment and Jobs Act (IIJA), as well as develop additional strategies on plastics, food waste and organics, critical minerals and electronics, textiles, and the built environment.

EPA works collaboratively with USDA, and the U.S. Food and Drug Administration (FDA) to reduce food waste in support of the national goal of reducing food loss and waste by 50 percent by 2030. EPA also is providing national estimates of food waste generation and management; convening, educating, and supporting communities seeking to reduce food waste.

The Save our Seas Act 2.0, passed by Congress in December 2020, demonstrates bipartisan congressional interest and provides EPA with authority to further act on domestic recycling and address plastic waste through new grant programs, studies, and extensive federal coordination. EPA is coordinating with DOE, several offices within the DOC (NIST, NOAA, USTR and ITA); and USAID to implement Save our Seas. EPA also works with federal agencies to implement Save Our Seas 2.0.

The IIJA was enacted on November 15, 2021. The IIJA provides funding for grants under section 302(a) of the Save Our Seas 2.0 Act as well as education and outreach grants focused on improving material recycling, recovery, management. The IIJA also establishes new programs focused on battery recycling and directs EPA to develop a model recycling program toolkit, increase coordination on federal procurement guidelines, and provide assistance to the educational community to incorporate recycling best practices into curriculum. EPA will coordinate closely with DOE on the development of battery recycling best practices and the voluntary labeling program, as DOE also received significant new IIJA funding to advance battery recycling.

Resource Conservation and Recovery Act (RCRA) and Toxic Substances Control Act (TSCA) Polychlorinated Biphenyl (PCB) Programs

The RCRA Corrective Action Program coordinates closely with OFAs, primarily DOD and DOE, which have many corrective action sites. A top Agency priority is to help federal facilities meet the Program's goals of investigating and cleaning up hazardous releases. EPA also coordinates with other agencies on cleanup and disposal issues posed by PCBs under the authority of the Toxic Substances Control Act (TSCA).

Emergency Preparedness and Response

EPA plays a major role in reducing the risks that accidental and intentional releases of harmful substances and oil discharges pose to human health and the environment. EPA's leadership in federal preparedness begins with co-chairing the National Response Team (NRT) and the 13 Regional Response Teams (RRTs) with the USCG. These teams, which have member participation from 15 total federal agencies (EPA, USCG, DOS, DOD, DHS/FEMA, DOE, USDA, DHHS (including CDC, NIOSH, and ATSDR), DOI, DOC, DOT, U.S. Nuclear Regulatory Commission, U.S. General Services Administration (GSA), DOJ, and the U.S. Department of Labor [DOL] [including OSHA]), provide guidance and deliver federal assistance to state, local, and tribal governments to plan for and respond to natural disasters, acts of terrorism, and other major environmental incidents. This requires coordination with many federal, state, and local agencies. The Agency participates with other federal agencies to develop national planning and implementation policies at the operational level.

EPA supports the Weapons of Mass Destruction Strategic Group (WMDSG) crisis-action team intended to coordinate the United States Government's efforts to successfully resolve a WMD threat and support interagency senior leader decision making. The WMDSG is comprised of over 50 SMEs representing over 15 different departments and agencies. The WMDSG is on call 24/7/365 to respond to the FBI's Strategic Information and Operations Center (SIOC) within two hours. The WMDSG – led by the FBI – provides enhanced coordination by focusing on information sharing and operation synchronization. The WMDSG helps maintain situational awareness by working directly with FBI Counterterrorism Division (CTD) regarding investigative activities, and the National Assets Command Post (NACP) regarding crisis operations.

The National Response Framework (NRF), under the direction of DHS, provides for the delivery of federal assistance to states to help them deal with the consequences of terrorist events, acts of malfeasance, as well as natural and other significant disasters. EPA maintains the lead responsibility for the NRF's Emergency Support Function #10 (covering inland hazardous materials and petroleum releases) and participates in the Federal Emergency Support Function Leaders Group which addresses NRF planning and implementation at the operational level.

The National Biodefense Strategy (NBS) provides a single coordinated effort to orchestrate the full range of activity that is carried out across the United States Government to protect the American people from biological threats. With National Security Presidential Memorandum (NSPM)-14, this strategy explains how the United States Government will manage its activities more effectively to assess, prevent, detect, prepare for, respond to, and recover from biological threats, coordinating its biodefense efforts with those of international partners, industry, academia, non-governmental entities, and the private sector. The Biodefense Steering Committee, chaired by the Secretary of Health and Human Services, and comprising the Secretary of State, the Secretary

of Defense, the Attorney General, the Secretary of Agriculture, the Secretary of Veterans Affairs, the Secretary of Homeland Security, and the Administrator of the Environmental Protection Agency, will be responsible for overseeing and coordinating the execution of the strategy and its implementation plan, and ensuring federal coordination with domestic and international government and non-governmental partners.

Chemical Accident Prevention and Response

Under CAA Section 112(r), EPA administers the Oil Spill Risk Management Program (RMP) regulations designed to prevent and respond to chemical accidents at fixed facilities that use or store large quantities of highly toxic or flammable substances in a process. In administering these regulations, EPA collaborates closely with other federal agencies, including DOL, DOT, DHS, and others. An important nexus for this collaboration is the National Working Group on Chemical Safety and Security, which includes participation by EPA, DOL/OSHA, DHS, DOT, and BATF. The Working Group was initially formed as a result of Executive Order 13650 – Improving Chemical Facility Safety and Security – which tasked federal agencies with various actions to further improve chemical facility safety and security in coordination with facility owners and operators. Through the Working Group, EPA works with federal agency partners to share information, develop fact sheets and guidance, and coordinate regulatory and policy actions relating to chemical safety and security. EPA also conducts additional regular coordination with DOL and OSHA, which administer the OSHA Process Safety Management standard, a regulation that shares common provisions with EPA's RMP regulations.

Under the Emergency Planning and Community Right-to-Know Act, EPA administers regulations that establish the list of extremely hazardous substances for community emergency response planning, as well as regulations that establish chemical inventory and release reporting requirements. In administering these regulations, EPA works closely with DOT, DHS, FEMA, and other agencies that are involved in planning for chemical emergencies. For example, EPA collaborates with the National Oceanic and Atmospheric Administration (NOAA) to develop the Computer Aided Management of Emergency Operations (CAMEO) software suite and Tier II Submit software, which provide free computer software tools to help fire departments, local emergency agencies and other stakeholders manage chemical inventory information and develop and implement emergency response plans.

Oil Spills

EPA is responsible for maintaining the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), which sets out the federal government's blueprint for responding to oil spills. More specifically, the NCP details federal responsibilities and procedures for preparing for and responding to discharges of oil or releases of hazardous substances, pollutants, or contaminants in inland and coastal zones of the U.S. EPA is authorized to amend the NCP in consultation with other federal agencies. Under the NCP, EPA serves as the pre-designated On-Scene Coordinator for oil discharges in the inland zone. As part of its responsibilities, EPA also maintains a list—called the Product Schedule—of dispersants and other chemical and bioremediation products that may be authorized for use during a spill.

EPA helps agencies such as FWS and the USCG and works in coordination to address oil discharges nationwide. EPA also assists agencies with judicial referrals when enforcement of violations becomes necessary. In addition, EPA and the USCG work in coordination to address oil spills nationwide. Under the authorities provided by the Federal Water Pollution Control Act (FWPCA) or Clean Water Act (CWA), EPA develops oil discharge response, prevention, and preparedness regulations. EPA also provides compliance monitoring activities to enforce these regulations and coordinates with USCG, DOT, and BSEE in their implementation.

EPA serves as member of the Interagency Coordinating Committee on Oil Pollution Research (ICCOPR) established under the Oil Pollution Act of 1990. ICCOPR coordinates a comprehensive program of oil pollution research, technology development, and demonstration among federal agencies in cooperation and coordination with external entities, such as industry, universities, research institutions, state governments, and other nations, as appropriate. Comprised of 16 federal agencies, ICCOPR is chaired by USCG, with EPA having served in a rotating Vice Chair capacity. ICCOPR develops priorities for oil spill research across the federal government on a 6-year cycle and prepares biennial reports to Congress on research activities and key interagency committee activities.

Strengthen Human Health and Environmental Protection in Indian Country

EPA, DOI, DHHS, USDA, and HUD work through several MOUs as partners to improve infrastructure on tribal lands. All five federal partners have committed to continue federal coordination in delivering services to tribal communities. The Infrastructure Task Force has built on prior partner successes, including improved access to funding and reduced administrative burden for tribal communities through the review and streamlining of Agency policies, regulations, and directives as well as improved coordination of technical assistance to water service providers and solid waste managers through regular coordination meetings and web-based tools.

Homeland Security

EPA's Homeland Security, Preparedness and Response Program continues to develop and maintain agency assets and capabilities to respond to and support nationally significant incidents with emphasis on those involving chemical warfare agents. The Program implements a broad range of activities for a variety of internal and multi-agency efforts consistent with the NRF and the Homeland Security Presidential Directives that EPA leads or supports. This includes being the lead analytical agency for environmental sampling during a CWA incident. EPA also coordinates its preparedness activities with DHS, FEMA, FBI, and other federal, state, and local agencies.

Research to Support Homeland Security

EPA collaborates with numerous agencies on Homeland Security research to leverage funding across multiple programs and produce synergistic results. EPA's Homeland Security Research Program works with DHS to back decisions made in its role as a lead agency responsible for cleanup during a Stafford Act declaration under ESF-10 and as the lead agency for water infrastructure. EPA also works with the DOD and its sub-organizations in its research work related to biological and chemical warfare agents. Further, EPA participates in a tri-agency research

partnership (Technical Coordination Working Group [TCWG]) with the DOD and DHS that focuses on chemical and biological defense needs and gaps. TCWG activities include: information sharing; joint science and technology research projects; and complementing policies. EPA also collaborates with the CDC in conducting biological agent research.

EPA works with these aforementioned entities and others to address areas of mutual interest and concern related to both homeland security cleanup and water infrastructure protection issues. The Program conducts joint research with USDA and DOI focusing on addressing homeland security threats at the intersection of the environment/public health and agriculture/natural resources. EPA also works with DOE to access and conduct research at the DOE's National Laboratories specialized research facilities, such as to establish the Water Security Test Bed and develop analytical capabilities for biological and chemical agents in environmental matrices.

Research to Support Land and Emergency Management Programs

EPA has complementary and joint programs with the USFS, USGS, USDA, USACE, NOAA, BLM, and many others to minimize duplication, maximize scope, and maintain a real-time information flow for land and emergency management issues. EPA coordinates its research to support a range of environmental priorities at other federal agencies, including work with DOD in its Strategic Environmental Research and Development Program and the Environmental Security Technology Certification Program, and works with DOE and its Office of Health and Environmental Research. EPA also conducts collaborative laboratory research with DOD, DOI, and USGS to improve characterization and risk management options for dealing with subsurface contamination. EPA also works through the Interstate Technology Regulatory Council (ITRC) in defining continuing research needs through its teams on topics including PFAS, radionuclides, and brownfields.

Chemical Safety and Pollution Prevention Programs

National Coordination for General Issues Relating to Chemical Safety

EPA established an Interagency Policy Group comprised of other federal agencies with interest and expertise in chemical issues to hold periodic meetings to obtain input on significant actions such as the TSCA Risk Evaluations, rules, and potential existing chemical candidates for Prioritization under TSCA. The agencies on the Interagency Policy Group include: CPSC, DOD, OMB, NASA, DOL, SBA, NIH, FDA, and CDC. EPA has utilized this group to review TSCA materials including, but not limited to, risk evaluations documents related to the scoping of existing chemicals for risk evaluation and associated draft risk evaluations. Additionally, EPA has initiated regular engagement with both NIOSH and OSHA to discuss occupational exposure assessments and risk management.

EPA also engages in biannual meetings with the OMNE² Committee, which includes the Occupational Safety and Health Administration (OSHA), Mining Safety and Health Administration (MSHA), NIOSH, and the NIEHS. The OMNE Committee exists to provide a

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² The OMNE Committee is named for the first letter in each participating agency's name.

venue for federal agencies to share information and coordinate activities regarding proposed rules, risk assessments, and risk management strategies for controlling exposure to chemicals.

Federal Lead Action Plan

Established by Executive Order 13045, the President's Task Force on Environmental Health Risks and Safety Risks to Children comprises 17 federal departments and offices and is co-chaired by the Secretary of DHHS and the EPA Administrator. In December 2018, through cross-governmental collaboration, the Task Force unveiled the Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts (Federal Lead Action Plan). The Federal Lead Action Plan is a blueprint for reducing lead exposure and associated harms by working with a range of stakeholders, including states, tribes and local communities, along with businesses, property owners and parents. In 2019, EPA released the *Implementation Status Report for EPA Actions under the December 2018 Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts*³ and *Progress Report on the Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts*. In FY 2022 and FY 2023, the Agency will continue to lead those goals and actions, coordinate with federal, state, tribal and community partners to amplify the impacts, and report on activities and implementation, as appropriate.

Participation in International Agreements addressing Chemicals and Pesticide Management

To participate effectively in international agreements addressing chemicals and pesticide management (e.g., the Stockholm Convention on Persistent Organic Pollutants, the Minamata Convention on Mercury, the Rotterdam Convention on the Prior Informed Consent Procedures for Certain Hazardous Chemicals and Pesticides in International Trade, the Strategic Approach to International Chemicals Management, CODEX Alimentarius, and a wide range of multilateral, regional, and bilateral free trade agreements), EPA coordinates with other federal agencies, such as the Office of the U.S. Trade Representative (USTR), DOS, DOC, USDA, DOE, FDA, and DHHS on a regular basis to develop the policy views and positions of the United States.

EPA also coordinates with other parts of the U.S. Government, including the Agency for Toxic Substances and Disease Registry (ATSDR), NIH, and CPSC, on more technical international matters related to the safety and management of chemicals and pesticides. At the regional and global levels, EPA engages in bilateral cooperation and information exchange with a wide range of countries and regional organizations, such as the European Union (EU), Canada, China, Australia, Japan, Brazil, and many others.

In addition to participating in the U.S. Government trade development process, EPA also specifically engages in trilateral cooperation with Canada and Mexico through the U.S.-Mexico-Canada (USMCA) Free Trade Agreement, particularly with respect to the provisions related to agriculture, technical barriers to trade, and environment, among others. Such engagement is designed to promote further trade and regional cooperation among the three governments through

⁴ For additional information, please visit: https://www.epa.gov/leadactionplanimplementation/progress-report-federal-action-plan-reduce-childhood-lead-exposures.

³ For additional information, please visit: https://www.epa.gov/sites/default/files/2019-04/documents/leadimplementationbooklet april2019.pdf.

targeted efforts and technical working groups. In 2022-2024, for example, under OCSPP's leadership, EPA is working within the USMCA's CEC with Canada and Mexico on a project to explore supply chain transparency to identify innovative approaches and digital tools supporting the identification and disclosure of chemical contents in goods and materials. The project is intended to foster best practices for information exchanges and collaboration and to engage different industry sectors, environmental experts, and government and technical authorities.

EPA also works closely with a number of countries in the context of the Organization for Economic Cooperation and Development (OECD) to further coordination amongst the OECD Member countries and observer governments. For example, OCSPP serves as the National Coordinator for the United States in support of the OECD Test Guidelines Program's mutual acceptance of data work, which aims to reduce the need to repeat health effects studies due to incompatible test protocols. Additionally, among others working groups and committees, EPA is engaged in the OECD Working Group on Pesticides (WGP), which shares pesticide registration work and develop tools to monitor and minimize pesticide risk to human health and the environment, and with the Chemicals and Biotechnology Committee, which oversees eleven working groups and other subsidiary bodies in the chemicals and pesticide arenas.

Capacity Building and Technical Assistance

EPA also participates significantly with other Agencies and international organizations in the development, coordination, and delivery of capacity-building and technical assistance. For example, OCSPP is collaborating with USDA's Foreign Agricultural Service and the Inter-American Institute for Cooperation on Agriculture to address the many inquiries from foreign countries on pesticide registrations, standard setting processes, maximum residue level (MRL) harmonization, and risk assessment procedures.

Certification and Training, Worker Protection, IPM, and Environmental Stewardship

EPA will continue to coordinate with USDA, DOD, DOI, DOE, tribes, territories, and states to implement Certification Plans for pesticide applicators who use the riskiest pesticides. EPA provides technical guidance and assistance to the states and tribes in the implementation of all pesticide program activities, such as protecting workers, promoting Integrated Pest Management and environmental stewardship. EPA also provides support through grants, cooperative agreements, or interagency agreements with states, tribes, and other partners, including universities, non-profit organizations, other federal agencies, pesticide users, environmental groups, and other entities, as necessary, to assist in strengthening and implementing EPA's pesticide activities, such as worker protection, pollinator protection and certifying pesticide applicators.

Assessing Potential Pesticide Risks with Supplemental Data

EPA relies on data from DHHS and USDA to supplement data from the pesticide industry to assist the Agency in assessing the potential risks of pesticides in the diets of adults and children. Specifically, EPA uses National Health and Nutrition Survey (NHANES) food consumption survey data developed by the DHHS, as well as pesticide residue data in food commodities generated by the USDA in its Pesticide Data Program (PDP) as inputs for dietary risk assessment.

Endangered Species & Pollinator Protection

EPA will continue collaborating with the USDA, FWS, and NMFS on protecting endangered and threatened species and improving methods for assessing potential risks and effects of pesticides to them. EPA, in cooperation with USDA, other federal agencies, state agencies, tribes, territories, and other entities, will continue to address pesticide risks to bees and other pollinators which are critical to our environment and the production of food crops.

Homeland Security – Protecting Food & Agriculture Sectors

EPA collaborates with the agencies such as DOD, DHS, DHHS, USDA, FDA, FEMA, and other federal, tribal, and state organizations on a variety of homeland security issues as part of the Government Coordinating Council (GCC) For Food and Agriculture. The issues focus on protecting the public and food and agriculture sector from various threats (e.g., biological agents, diseases, or natural disasters) which are vital to critical functions of the government and private sector. EPA collaborates with these organizations on many issues such as research pertaining to effective disinfectants for high threat microorganisms, planning for response to various potential incidents, training and development of policies and guidelines. In addition to GCC efforts, EPA continues to partner with the OSHA, NIOSH, and CPSC on risk assessment and risk mitigation activities.

Pesticide Program Dialogue Committee (PPDC) and State and Tribal Stakeholder Groups

One of the Agency's methods for receiving input on pesticide issues has been the Pesticide Program Dialogue Committee (PPDC), a Federal Advisory Committee, that brings together a broad cross-section of knowledgeable stakeholders from organizations that represent divergent views in order to discuss pesticide regulatory, policy, and implementation issues. The PPDC includes members from federal and state governments, industry/trade associations, pesticide user and commodity groups, consumer and environmental/public interest groups, and others. The PPDC provides a structured environment for meaningful information exchanges and discussions, and keeping the public involved in decisions that affect them. Dialogue with outside groups is essential for the Agency to remain responsive to the needs of its many partners. EPA also works extensively with the Association of American Pest Control Officials and the Tribal Pesticide Program Council to maximize communication with states, tribes, and territories on pesticide implementation issues.

General Research to Support Chemical Safety

EPA participates in a multi-agency effort under the *Tox21* Consortium. *Tox21* pools chemical research, data and screening tools from multiple federal agencies including EPA, and the NIH and FDA. EPA has contributed a chemical library, currently exceeding 4,000 chemicals, to the Tox21

testing program.^{5,6} Nearly all of this library includes data from EPA's Toxicity Forecaster (*ToxCast*TM), an effort that utilizes existing resources to develop faster, more thorough predictions of how chemicals may affect human and environmental health. The Tox21 Consortium has screened thousands of chemicals with more than 70 assays, resulting in more than 120 million data points which can inform decision making regarding the safety of chemicals. The full Tox21 library comprises approximately equal sized contributions from EPA, National Toxicology Program (NTP), and National Center for Advancing Translational Sciences (NCATS).

PFAS are a large, diverse class of chemicals that have been widely used in industry and consumer products and are ubiquitous in the environment. EPA is committed to working collaboratively with federal, state, tribal and local partners to address the challenges posed by PFAS. Efforts include working with other federal agencies to address scientific challenges such as the lack of published toxicity data for most PFAS chemicals. The results will be used to identify categories of PFAS chemicals having similar structural and toxicological properties that may inform the development and strength of predictive toxicological models. EPA anticipates increased interagency collaboration on PFAS research and development efforts through an OSTP-led interagency working group, established as required by the FY 2021 National Defense Authorization Act. Resources requested in FY 2023 will build upon the research foundation formed from completed work.

Research to Support the Amended Toxic Substances Control Act

EPA collaborates globally with other federal agencies on research to accelerate the pace of chemical risk assessment and to provide greater regulatory certainty for the public. EPA is working with Health Canada and the European Joint Research Center on the development and testing of new non-animal approach methodologies to evaluate chemicals quickly and cost-effectively for safety. These new approach methods are a critical part of implementing the TSCA Strategic Plan to reduce, refine, and replace the use of vertebrates in toxicity testing and evaluation. EPA also commenced work with Health Canada and ECHA to promote sharing of non-confidential chemical safety information with the intent of advancing chemical evaluations across regulatory jurisdictions. This collaborative approach will help EPA and other federal agencies screen, prioritize, and evaluate chemicals, and promote implementation of alternative methods to replace vertebrate animal testing under TSCA. Finally, EPA is engaged in multiple OECD chemical safety groups that share information, expertise, and research results related to chemical safety. Ultimately, these international efforts will work towards creating transparent data requirements for industry and reducing the regulatory uncertainty of multiple regulatory environments globally.

Research to Support Agencywide Risk Assessment Activities

EPA consults and collaborates routinely with other federal agencies about the science of individual Integrated Risk Information System (IRIS) assessments. EPA also coordinates, respectively, with: ATSDR, through an MOU on the development of toxicological reviews and toxicology profiles;

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⁵ Collins, F.S., Gray, G.M., and Bucher, J.R. (2008). Transforming environmental health protection. *Science*, *319*, 906–907. doi: 10.1126/science.1154619.

⁶ Tice, R.R., Austin, C.P., Kavlock, R.J., and Bucher, J.R. (2013). Improving the human hazard characterization of chemicals: a Tox21 update. *Environmental Health Perspectives*, 121, 756–765. doi: 10.1289/ehp.1205784.

NIEHS and the National Toxicology Program, on assessment methodology, software, and assay development platforms; FDA on advisories and reports; and DOD on assessment development methods. In addition, EPA contracts with the National Academy of Sciences' National Research Council (NRC) on very difficult and complex human health assessments through consultation or review. EPA also participates in the Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM) to work towards increasing the efficiency and effectiveness of U.S. federal agency test method review, eliminating unnecessary duplication of effort, sharing experience among U.S. federal regulatory agencies, and reducing, refining, and replacing the use of animals in testing.

Enforcement and Compliance Assurance Programs

General Enforcement Coordination

The Enforcement and Compliance Assurance Program coordinates closely with:

- DOJ on all civil and criminal environmental enforcement matters. In addition, the Program has coordinated with other agencies on specific environmental issues as described herein;
- The Chemical Safety and Hazard Investigation Board, OSHA, and ATSDR in preventing and responding to accidental releases and endangerment situations;
- DOI's BIA, and DHHS's IHS on issues relative to compliance with environmental laws in Indian country;
- The DOC and SBA on the implementation of SBREFA. In addition, it has collaborated with the SBA to maintain current environmental compliance information at *Business.gov*, a website initiated as an e-government initiative in 2004, to help small businesses comply with government regulations. The IRS on cases that require defendants to pay civil penalties, thereby assisting the IRS in assuring compliance with tax laws;
- USACE on wetlands issues;
- DOT's Pipeline and Hazardous Materials Safety Administration on pipeline spills; and,
- USDA on the regulation of animal feeding operations and on food safety issues arising from the misuse of pesticides and shares joint jurisdiction with the Federal Trade Commission on pesticide labeling and advertising.

International Trade

EPA works with U.S. Customs and Border Protection (CBP) on implementing the secure International Trade Data System (ITDS) across all federal agencies and on chemical and pesticide imports, hazardous waste and Cathode Ray Tube exports, imports of internal combustion vehicles and engines that do not meet Clean Air Act requirements, as well as on a variety of other import/export issues under the various statutes.

Coordination on Issues Involving Shared Jurisdiction

EPA and FDA share jurisdiction over general-purpose disinfectants used on non-critical surfaces and some dental and medical equipment surfaces. EPA and FDA also collaborate and share information on Good Laboratory Program inspections to avoid duplication of inspections and maximize efficient use of limited resources. EPA, FDA, and FAA jointly regulate drinking water

safety on airlines via the Aircraft Drinking Water Rule. The Agency has entered into an agreement with HUD concerning enforcement of the TSCA lead-based paint notification requirements. The Agency has coordinated with the USCG under the Act to Prevent Pollution from Ships, and on discharges of pollutant from ships and oil spills under the CWA. EPA also works with DOI on CWA permit enforcement on the Outer Continental Shelf, as well as both the Interior and Transportation Departments on enforcement of CWA requirements for offshore facilities.

Criminal Enforcement

EPA's Criminal Enforcement Program coordinates with FBI, CBP, DOL, U.S. Treasury, DHS, DOI, USCG, and DOJ and with international, state, tribal, and local law enforcement organizations in the investigation and prosecution of environmental crimes. EPA also works with DOJ to establish task forces that bring together federal, state, tribal, and local law enforcement organizations to address environmental crimes. EPA has an Interagency Agreement with DOJ's Environment and Natural Resources Division to develop the first federal Environmental Crime Victim Assistance Program. This allows both agencies to meet their statutory obligations under the Crime Victims' Rights Act (CVRA) and the Victims' Rights and Restitution Act (VRRA), to make sure that environmental crime victims are notified of and accorded their rights under the CVRA and VRRA. In addition, the Program has an Interagency Agreement with the DHS to provide specialized criminal environmental training to federal, state, local, and tribal law enforcement personnel at the Federal Law Enforcement Center (FLETC) in Glynco, Georgia.

Monitoring the Environmental Compliance of Federal Agencies

Most environmental statutes require departments, agencies, and instrumentalities of the U.S. government to comply with environmental requirements just like any other regulated entity. EPA and states inspect federal facilities and take enforcement actions, as appropriate. In addition, Executive Order 12088 on *Federal Compliance with Pollution Control Standards* directs EPA to monitor compliance by federal agencies with all environmental laws and provide technical assistance. The Federal Facility Enforcement Program coordinates with other federal, state, tribal, and local agencies to ensure compliance by federal agencies with all environmental laws. EPA works with the Federal Facilities Environmental Stewardship and Compliance Assistance Center (*FedCenter*) (www.fedcenter.gov), which is governed by a board of more than a dozen contributing federal agencies. EPA also partners with other federal agencies to identify ways to expedite cleanup of Superfund sites and prevent and address regulatory compliance issues. *FedCenter* works with federal agencies to plan Federal Environmental Symposiums to encourage collaboration, information sharing, stewardship, and improved environmental compliance across the federal government. EPA is working with other Agencies through *FedCenter* to address Administration priorities including PFAS and environmental justice.

EPA has commenced a number of specific collaborative efforts to work one-on-one with other federal agencies to help foster productive relationships through environmental compliance outreach efforts. We have developed partnerships with other federal agency headquarters offices including, for example, HHS, BIA, DOD, DOE, and NASA to discuss EPA's compliance initiatives and explore ways EPA can best help federal agencies remain aware of their environmental compliance status and requirements nationwide. We have instituted a biweekly

dialogue with DOD to help address compliance issues at housing for military personnel with a particular focus on compliance with lead-based paint requirements.

In the context of EPA's compliance initiatives, the Agency proactively addresses potential significant noncompliance by sending letters to federal agencies highlighting facility noncompliance so facilities can expeditiously take the necessary actions to address the compliance issues. EPA also has issued multiple compliance advisories geared to other federal agencies providing information on the Agency's compliance initiatives.

Superfund Enforcement

EPA coordinates with OFAs in their use of CERCLA enforcement authority. This includes the coordinated use of such authority at individual hazardous waste sites that are located on both non-federal land (EPA jurisdiction) and federal lands (other agency jurisdiction). As required by Executive Order 13016, EPA also reviews and concurs on the use of CERCLA Section 106 authority by other departments and agencies.

EPA coordinates closely with Federal Land Management Agencies (FLMAs), such as BLM and USFS, at mixed ownership sites (*i.e.*, those sites located partially on privately-owned land and partially on federally-owned land) pursuant to Executive Order 12580. EPA frequently enters into Memoranda of Understanding (MOUs) with FLMAs designed to provide a framework for agencies to coordinate response actions. Most recently, EPA has completed an MOU with FLMAs to improve the efficient and effective use of federal resources to cleanup at mixed ownership mining sites. EPA meets with DOI and USDA as part of the Federal Mining Dialogue, to discuss developments arising out of the CERCLA work at such sites.

EPA also coordinates with DOI, USDA, DOC, DOE, and DOD to ensure that appropriate and timely notices, required under CERCLA, are sent to the Natural Resource Trustees notifying them of potential damages to natural resources. EPA also coordinates with Natural Resource Trustees on natural resource damage assessments, investigations, and planning of response activities under Section 104 of CERCLA. When an enforcement action is initiated at a site where hazardous substances are found to have caused damages to natural resources, EPA coordinates with the Trustees by including them in negotiations with potentially responsible parties concerning the releases that have caused those damages.

EPA's Superfund Federal Facilities Enforcement Program ensures that: (1) all federal facility sites on the NPL have interagency agreements, also known as Federal Facility Agreements (FFAs) with enforceable cleanup schedules; (2) FFAs are monitored for compliance; (3) federal sites are transferred to new owners in an environmentally responsible manner; and (4) compliance assistance is available to the extent possible. This program also ensures that federal agencies comply with Superfund cleanup obligations "in the same manner and to the same extent" as private entities. To enable the cleanup and reuse of such sites, the Federal Facilities Enforcement Program also has coordinated creative solutions that help restore facilities, so they can once again serve an important role in the economy and welfare of local communities, and the country. EPA also has established a partnership with ECOS and DOE, the DOE Dialogue, to build relationships and tackle enduring challenges at DOE cleanup sites.

International and Tribal Affairs Programs

Supporting Global Policy to Reduce Pollution and Harmful Chemicals

EPA has a strong network of partners working to achieve reductions in global mercury use and emissions, particularly when adverse U.S. impacts would be likely. EPA works closely with the DOS in leading the technical and policy engagement for the U.S. in the Minamata Convention on Mercury and the multi-stakeholder Global Mercury Partnership. In addition to the DOS, EPA collaborates with several federal agencies including USGS and USAID to advance robust implementation of the Minamata Convention by other countries. EPA also continues to share information through the Arctic Council on reducing releases of mercury which disproportionally impact indigenous arctic communities.

Similarly, EPA is engaged in a multi-pronged effort to address the growing global problem of marine litter. Here, EPA works with the DOS, NOAA, Peace Corps, and USAID to advance policy and technical solutions for marine litter in global fora. EPA also is working with USDA, OMB, and FDA on the on reducing food waste which includes international cooperation on measuring food waste reductions and pilot activities that can create market opportunities for U.S. technologies and innovation.

Tackling the Climate Crisis, Accelerating Environmental and Economic Justice

EPA works with international partners, such as foreign governments and international organizations, to deploy assistance that can strengthen on the ground action to tackle the climate crisis, reduce transboundary pollution that impacts local communities and travels through the environment to impact other communities across the globe, and that strengthen fundamental environmental rule of law. An important example of this work is EPA's engagement in the Group of Seven (G7) and the Group of Twenty (G20) through environment ministerial meetings which negotiate outcomes on key EPA issues such as climate change, food waste, marine litter, resource efficiency, and air quality. EPA's engagement with international financial institutions, United Nations (UN) entities, and the Organization for Economic Cooperation (OECD).

Supporting Environmental Priorities in Global Trade Policy and Implementation of Environmental Cooperation Agreements

Since the 1972 Trade Act mandated USTR engage in interagency consultations, EPA has played a key role in trade policy development. Specifically, EPA is a member of the Trade Policy Staff Committee, the Trade Policy Review Group and relevant subcommittees – interagency mechanisms that provide advice, guidance, and clearance to USTR in the development of U.S. international trade and investment policy.

EPA continues its participation in the North American Commission for Environmental Cooperation (CEC), which provides regional and international leadership to advance environmental protection, human health, and sustainable economic growth in North America. EPA also will continue work on implementation of the Environment Chapter of the United States-Mexico-Canada Agreement (USMCA) and other free trade agreements. EPA also continues active

participation in the United States Trade Representative (USTR)-led Interagency Environment Committee for Monitoring and Environment (IECME) established to promote Mexican and Canadian compliance with their environmental obligations. In addition, EPA continues to work with partners (including the U.S. Treasury, State Department, USAID, and the U.S. International Development Finance Corporation), to improve environmental governance of U.S. funded international development projects.

Addressing Transboundary Pollution

EPA collaborates with countries around the world to address foreign sources of pollution in coordination with DOS, USAID, DOJ, Treasury, and others. EPA works closely with DHHS to advance recognition of environmental risk factors of non-communicable diseases (NCDs) and how to mitigate the risks, including from lead and mercury. In addition, EPA continues to strengthen its activities in the Arctic by working with Alaska, tribes, federal agencies, and the private sector to build international support for U.S. environmental policy objectives through the Arctic Council. These objectives cover a range of topics, including reducing emissions and exposure to mercury. EPA also plays a leadership role with other agencies including NOAA, DOS, and USAID in crafting sound programs to address marine litter globally, ensuring that sound waste management and recycling strategies are advanced in key source countries. Further, EPA collaborates with DOS, the Government of Canada, tribes, federal agencies, and other stakeholders to address transboundary water pollution caused by historic and current mining practices in the Kootenai watershed.

Working in Indian Country

EPA is an active participant in the White House Council on Native American Affairs (WHCNAA). The WHCNNA is an interagency Principals-level council established by President Obama's Executive Order 13647 in June 2013, in response to requests from tribal leaders across Indian country for a Cabinet-level council to uphold treaty and trust obligations, support the Nation-to-Nation relationship, and improve tribal engagement and consultation. The Biden-Harris Administration has reconvened the WHCNAA and established six sub-committees: Climate Change, Tribal Homelands, and Treaties; Health; Education; Economic Development; Energy and Infrastructure; Public Safety and Justice; and International Indigenous Issues.

EPA serves as the co-lead (with DOI and USDA) of the Climate Change, Tribal Homelands, and Treaties Committee. Within this Committee, EPA is a co-lead and lead on two subcommittees, including the Tribal Treaty Rights MOU Subcommittee and the Climate Adaptation Subcommittee. Both this Committee and the Subcommittees meet on a regular basis.

EPA also serves as the co-lead (with DOI and the DOS) on the International Indigenous Issues Committee. Within this Committee, EPA is co-lead on three subcommittees, including Human Rights and Environmental Justice, Cross Border Issues, and Climate Crisis. Both this Committee and the Subcommittees meet on a regular basis.

Additionally, EPA is involved as a participant in the Health Committee and is an active participant on the Water/Sanitation Subcommittee. Both this Committee and the Subcommittee meet on a regular basis.

EPA continues work as a federal partner under the federal interagency Memorandum of Understanding Regarding Interagency Coordination and Collaboration for the Protection of Tribal Treaty Rights and Reserved Rights which was signed by the EPA Administrator on August 5, 2021. The signatories to affirm their commitment to protect tribal treaty rights, reserved rights and similar tribal rights to natural and cultural resources and work to demonstrate that commitment through early consideration of treaty and reserved rights in agency decision-making and regulatory processes.

Central Planning, Budgeting and Finance Programs

Working with Federal Partners on Improving Management and Accountability throughout the Federal Government

EPA coordinates appropriately with Congress and other federal agencies, such as the U.S. Treasury, the Government Accountability Office (GAO), and GSA. EPA participates and makes active contributions to standing interagency management committees, including:

- the Chief Financial Officers Council, which focuses on improving resources management and accountability throughout the federal government;
- the Performance Improvement Council, which coordinates and develops strategic plans, performance plans, and performance reports as required by law;
- OMB-led E-Government initiatives, such as the Financial Management and Budget Formulation and Execution Lines of Business;
- the Bureau of Census-maintained Federal Assistance Awards Data System;
- the President's Management Council, which oversees developing and implementing Cross-Agency Priority (CAP) goals; and
- the Evaluation Officer Council, which serves as a forum to exchange information with the broader Federal evaluation community.

Provide Government-to-Government Employee Relocation Services

EPA provides government-to-government employee relocation services via interagency agreements through EPA's Federal Employee Relocation Center (FERC) as a Working Capital Fund (WCF) activity. EPA-FERC provides "one-stop shop" domestic and international relocation services to other federal agencies to increase operational efficiency and save the government money. Relocation services are provided internally to all EPA offices, and externally to the Transportation Security Administration (TSA), Alcohol, Tobacco, Firearms, and Explosives (ATF), DOL, Office of Personnel Management (OPM), United States Patent and Trademark Office (USPTO), Health and Human Services Office of Global Affairs (HHS-OGA), and United States Agency of Global Media (USAGM).

Mission Support Programs

Working with Federal Partners on Improving Management and Accountability throughout the Federal Government

EPA provides leadership and expertise to government—wide activities in various areas of human resources, grants management, contracts management, suspension and debarment, and homeland security. These activities include specific collaboration efforts through:

- The Chief Human Capital Officers Council, a group of senior leaders that discuss human capital initiatives across the federal government.
- The Legislative and Policy Committee, a committee comprised of other federal agency representatives who assist OPM in developing plans and policies for training and development.
- The Chief Acquisition Officers Council, the principal interagency forum for monitoring and improving the federal acquisition system. The Council also is focused on promoting the President's specific initiatives and policies in all aspects of the acquisition system.
- The Award Committee for E-Government (E-Gov) provides strategic vision for the portfolio of systems/federal wide supporting both federal acquisition and financial assistance. Support also is provided to the associated functional community groups, including the Procurement Committee for E-Gov, the Financial Assistance Committee for E-Gov, and the Intergovernmental Transaction Working Group.
- The Grants Quality Service Management Office (QSMO) leads efforts to transform the federal grants management process by focusing on standardization and modernization of grants systems to increase efficiency and reduce burden for grant applicants, recipients, and the federal grants workforce; and better leveraging the buying power of the government to access high-quality shared solutions and reduce costs. The Grants QSMO supports the work of OMB's Office of Federal Financial Management and Office of the Federal Chief Information Officer and GSA's Office of Shared Solutions and Performance Improvement.
- The Interagency Suspension and Debarment Committee (ISDC), a representative committee of federal agency leaders in suspension and debarment. The Committee facilitates lead agency coordination, serves as a forum to discuss current suspension and debarment related issues, and assists in developing unified federal policy. Besides participating in the ISDC, EPA: (1) provides instructors for the National Suspension and Debarment Training Program offered through the Federal Law Enforcement Training Center, and (2) supports the development of coursework and training on the suspension and debarment process for the Inspector General Academy and the Council of the Inspectors General on Integrity and Efficiency.
- The Financial Management Line of Business (FMLoB) has been expanded to also encompass the Grants Management Line of Business. The combined FMLoB, with U.S. Treasury as the managing partner, will more closely align the financial assistance and

financial management communities around effective and efficient management of funds. EPA also participates in the Grants.gov Users' Group, as well as the Federal Demonstration The Interagency Committee on Federal Advisory Committee Management (Committee Management Officer Council) provides leadership and coordination on federal advisory committee issues and promotes effective and efficient committee operations government-wide. In addition to serving on the Council, EPA works with the GSA Committee Management Secretariat to establish and renew advisory committees, conduct annual reviews of advisory committee activities and accomplishments, maintain committee information in a publicly accessible online database, and develop committee management regulations, guidance, and training. Further, EPA participates on the GSA Federal Advisory Committee Act (FACA) Attorney Council Interagency Workgroup to keep abreast of developments in the statutory language, case law, interpretation and implementation of the FACA.

- The Interagency Security Committee (ISC) is the leading organization for nonmilitary federal departments and agencies in establishing policies for the security and protection of federal facilities, developing security standards, and ensuring compliance with those standards. EPA participates in the ISC as a primary member and in sub-committees and workgroups to facilitate EPA's compliance with ISC standards for facilities nationwide.
- The OPM Background Investigations Stakeholder Group (BISG) is a collaborative organization that is derived from the Intelligence Reform and Terrorism Prevention Act of 2004. The BISG is comprised of senior security officials across the federal government who are responsible for the submission, adjudication and/or oversight of personnel security programs. EPA works with this group to discuss topics regarding background investigations, focusing on standardizing and improving the Agency's personnel security program.
- EPA manages the Senior Environmental Employment (SEE) Program's interagency agreements with other federal agencies. The interagency agreements are with the White House/CEQ, the CDC/ATSDR, and the Gulf Coast Ecosystem Restoration Council. SEE enrollees provide administrative, technical, and professional support to these agencies for projects relating to pollution prevention, abatement, and control.
- Partnership which is designed to reduce the administrative burdens associated with research grants.
- EPA's Office of Administrative Law Judges (OALJ) partners with the USPTO, NOAA, the Alcohol and Tobacco Tax and Trade Bureau, the Merit Systems Protection Board, and the Equal Employment Opportunity Commission to serve as Presiding Officers for proceedings to adjudicate complaints brought before the partner organizations. This collaboration allows partner organizations the ability to provide constitutionally guaranteed legal due process and review without staffing and supporting their own Offices of Administrative Law Judges, while EPA's judges expand their experience and knowledge in the area of administrative law. The services OALJ provides to other agencies are reimbursed by the borrowing organization.

Work with the Department of Interior's Interior Business Center

In FY 2023, EPA will continue working with DOI's Interior Business Center (IBC), an OPM- and OMB-approved Human Resources Line of Business shared service center. IBC offers HR transactional processing, compensation management and payroll processing, benefits administration, time and attendance, HR reporting, talent acquisition systems, and talent management systems. EPA also continues its charter membership on the OPM HR Line of Business (LoB) Multi Agency Executive Strategy Committee (MAESC), providing advice and recommendations to the Director of OPM as well as additional government-wide executive leadership, for the implementation of the HR LoB vision, goals, and objectives.

Partnering with GSA on the USAccess Program

EPA is partnering with GSA on the *USAccess* Program for Personal Identity Verification cards and identity credential solutions, which provides an efficient, economical and secure infrastructure to support its credentialing needs, and migrations to the Enterprise Physical Access Control System, allowing the Agency to control access in EPA space, including restricted and secure space.

Environmental Information Programs

To support EPA's overall mission, the Agency collaborates with federal, state, and tribal agencies on a variety of initiatives focused on making government more efficient and transparent in protecting human health and the environment. EPA's Environmental Information programs are primarily involved in the information technology (IT), information management (IM), and information security aspects of the projects on which it collaborates.

The Chief Information Officer (CIO) Council

The CIO Council is the principal interagency forum for improving practices in the design, modernization, use, sharing, and performance of federal information resources. The Council develops recommendations for IT/IM policies, procedures, and standards; identifies opportunities to share information resources; and assesses and addresses the needs of the federal IT workforce.

The Chief Data Officer (CDO) Council

The CDO Council was established by statute in the Foundations for Evidence-Based Policymaking Act of 2018. The Council's vision is to improve government mission achievement and increase the benefits to the Nation through improvement in the management, use, protection, dissemination, and generation of data in government decision-making and operations.

eRulemaking

The eRulemaking Program is a Federal E-Government shared LoB that manages the Federal Docket Management System (FDMS) and Regulations.gov. The Program provides the public with one-stop access to electronic dockets and the ability to electronically comment on proposed rulemakings and de-regulatory actions for multiple federal agencies.

At the beginning of FY 2020, the Program Managing Organization transitioned from EPA to the GSA. EPA will continue working with GSA as a Partner Agency to improve FDMS and provide the public with access to electronic dockets and the ability to electronically comment on proposed rulemaking and de-regulatory actions.

The National Environmental Information Exchange Network (EN)

EPA's EN Program and CBP are coordinating on using the Automated Commercial Environment (ACE) system. This coordination will lead to automated processing of over 8 million EPA-related electronic filings needed to clear legitimate imports and exports. With the move from paper filings to electronic filings combined with automated processing through ACE, filing time can be reduced from weeks/days to minutes/days. This significant processing improvement directly impacts the movement of goods into commerce and the economy while helping to ensure compliance with environmental and CBP laws and regulations. It also helps the U.S. Government keep pace with the speed of business.

Automated Commercial Environment/International Trade Data System (ACE/ITDS)

ITDS is the electronic information exchange capability, or "single window," through which businesses will transmit data required by participating agencies for the import or export of cargo. ACE is the system built by CBP to ensure that its customs officers and other federal agencies have the information they need to decide how to handle goods and merchandise being shipped into or out of the United States. It also will be the way those agencies provide CBP with information about potential imports/exports. ITDS eliminates the need, burden, and cost of paper reporting. It also allows importers and exporters to report the same information to multiple federal agencies with a single submission and facilitates movement of cargo by automating processing of the import and exports. ITDS provides the capability for industry to consolidate reporting for commodities regulated by multiple agencies. For these consolidated reports, the industry filers will receive the appropriate status response when their filings meet each agency's reporting requirements. Once all agency reporting requirements have been met, filers can receive a coordinated single U.S. government response to proceed into the commerce of the United States.

EPA has the responsibility and legal authority to make sure pesticides, toxic chemicals, vehicles and engines, ODS, and other commodities entering and hazardous waste exiting the country meet its human health and environmental standards. EPA's ongoing collaboration with CBP on the ACE/ITDS effort will improve the efficiency of processing these shipments through information exchange between EPA and CBP and automated processing of electronic filings. As resources permit, EPA will continue to work with CBP to automate the manual paper review process for admissibility so that importers and brokers (referred to collectively as Trade) can know before these commodities are loaded onto an airplane, truck, train, or ship if their shipment meets EPA's reporting requirements. Because of this automated review, Trade can greatly lower its cost of doing business and customs officers at our nation's ports will have the information on whether shipments comply with our environmental regulations. EPA will continue to collaborate with CBP to support regulatory changes and integrate with new ACE capabilities for streamlining the import and export processes for America's businesses.

Geospatial Information

EPA works with 31 federal agencies through the activities of the Federal Geographic Data Committee (FGDC) and the OMB Geospatial Line of Business (Geo LoB). EPA also participates in the FGDC Steering Committee. A key component of EPA's work with FGDC is developing and implementing the National Spatial Data Infrastructure (NSDI) and the National GeoPlatform. The key objective of the NSDI is to make a comprehensive array of national spatial data – data that portrays features associated with a location or tagged with geographic information and can be attached to and portrayed on maps - easily accessible to both governmental and public stakeholders. Use of this data, in tandem with analytical applications, supports several key EPA and government-wide business areas. These include ensuring that human health and environmental conditions are represented in the appropriate contexts for targeting and decision making; enabling the assessment, protection, and remediation of environmental conditions; and aiding emergency first responders and other homeland security activities. EPA supports geospatial initiatives through efforts such as EPA's GeoPlatform, EPA's Environmental Dataset Gateway, the Exchange Network, National Environmental Policy Act (NEPA) Assist, EJScreen, the EPA Metadata Editor, Facilities Registry System (FRS) Web Services, and My Environment. EPA also works closely with its state, tribal, and international partners in a collaboration that enables consistent implementation of data acquisition and development, standards, and technologies supporting the efficient and cost-effective sharing and use of geographically-based data and services.

Federal Executive Boards

The Federal Executive Boards will be established in FY 2023. This LoB will replace the current *ad hoc* structure and provide more support to regional Federal Executive Board staff members. In line with the Biden Administration's initiatives, the Federal Executive Boards will support and strengthen the Federal Workforce.

The Administrator's Office

Regulatory Management and Economic Analyses

EPA's Policy Office (OP) interacts with federal agencies during its rulemaking activities. Per governing statutes and agency priorities, OP submits "significant" regulatory actions to OMB for interagency review prior to signature and publication in the *Federal Register*. In addition, OP coordinates EPA's review of other agency's regulatory actions submitted to OMB for review. Under the Congressional Review Act, rules are submitted to each chamber of Congress and to the Comptroller General of the United States. For regulations that may have a significant economic impact on a substantial number of small entities, OP collaborates extensively with SBA and OMB. OP also collaborates with other federal regulatory and natural resource agencies to collect data used in economic benefit-cost analyses of environmental regulations and policies and to foster improved interdisciplinary research and reporting. Activities include representing EPA on interagency workgroups or committees tasked with measuring the economic benefits and costs of federal policies and programs. Occasionally, OP also provides technical reviews of other agencies research and analyses. In addition, OP's Office of Federal Activities, engages early with the lead federal agency and supports CEQ for significant regulatory actions that require compliance with

National Environmental Policy Act via an Environmental Impact Statement (EIS). In so doing, EPA provides technical assistance, as needed, to help scope and develop the draft EIS, recommending ways to avoid and minimize impacts to improve environmental outcomes.

Children's Health

The Administrator of EPA and the Secretary of DHHS co-chair the President's Task Force on Environmental Health Risks and Safety Risks to Children. The Task Force comprises 17 federal departments, agencies and White House offices. A senior staff steering committee, co-chaired by the Director of EPA's Office of Children's Health Protection (OCHP), coordinates interagency cooperation on Task Force priority areas, including lead, asthma disparities, climate change, emergencies, and disasters. As part of this effort, OCHP coordinates with other agencies to improve government-wide support in implementing children's health legislative mandates and outreach, including providing children's environmental health expertise on interagency activities and coordinating EPA expertise. OCHP also coordinates with ATSDR to support provision of training and hands on consultations with doctors, nurses, and other medical professionals to address issues of potential exposures of children to environmental contaminants, such as lead and asthma triggers including mold and vermin. OCHP also works the Interagency Policy Council's groups on Maternal Health and Child Development, as well as with other federal agencies to address emerging risks to children's environmental health and supports federal interagency information exchange and cooperation, such as on lead and wildfires. This work supports not only Presidential Executive Order (EO) 13045: Protection of Children from Environmental Health Risks and Safety Risks, but also addresses climate change and environmental justice under Presidential EO 14008: Tackling the Climate Crisis at Home and Abroad.

Climate Adaptation and Resilience

Presidential EO 14008 on *Tackling the Climate Crisis at Home and Abroad* created the National Climate Task Force which facilitates the organization and deployment of a government-wide approach to combat the climate crisis. A key component of this is to increase resilience to the impacts of climate change and to protect public health; conserve our lands, waters, oceans, and biodiversity. EPA works with FEMA, DOT, DOI, NOAA, HUD, BIA, HHS, and many other agencies to ensure our programs, infrastructure investments, remedies and communities are resilient to the immediate and long-term impacts of the changing climate both within the task force and through the full breadth of partnership EPA has with OFAs. In June 2013, the White House Council on Native American Affairs was established by EO. In June 2021, a subgroup on Tribal Climate Adaptation was created, chaired by EPA, to enable a whole-of-government approach to supporting tribes as they anticipate, prepare for, adapt to, and recover from the devastating impacts of climate change. EPA participates in interagency efforts related to climate change and the Nation's coasts. EPA is engaging the NIST's Climate Resiliency Program to share experiences, expertise, and support areas of mutual interests.

Environmental Justice

Presidential EO 14008 on Tackling the Climate Crisis at Home and Abroad enhanced and expanded several important means of interagency coordination and collaboration related to

environmental justice. EO 14008 elevated the existing Interagency Working Group on Environmental Justice, formerly chaired by EPA, to the White House Environmental Justice Interagency Council (IAC), chaired by the CEQ. This executive order also established a White House Environmental Justice Advisory Council (WHEJAC) to provide advice and recommendations to the IAC and CEQ on environmental justice recommendations for the entirety of the executive branch of the federal government. The IAC will be the primary venue for interagency coordination of executive branch federal activities related to environmental justice. Through the Justice 40 Initiative, also mandated in EO 14008, the IAC will work to achieve the goal that forty percent of federal benefits from certain federal programs flow to disadvantaged communities and will publish an annual public performance scorecard on implementation by federal agencies. The IAC will likewise coordinate recommendations on further updates to EO 12898 and provide leadership to interagency efforts to address current and historic environmental injustices. As stipulated in EO 14008, EPA will provide all support necessary for administration of the WHEJAC and is one of three agencies charged with providing support to CEQ for administration of the IAC. EPA also will play a prominent membership role within the IAC as a participating agency.

National Climate Task Force

The Administrator of EPA is a member of the National Climate Task Force. The Task Force shall facilitate the organization and deployment of a Government-wide approach to combat the climate crisis. This Task Force shall facilitate planning and implementation of key Federal actions to reduce climate pollution; increase resilience to the impacts of climate change; protect public health; conserve our lands, waters, oceans, and biodiversity; deliver environmental justice; and spur well-paying union jobs and economic growth. As necessary and appropriate, members of the Task Force will engage on these matters with state, local, tribal, and territorial governments; workers and communities; and leaders across the various sectors of our economy.

Community Revitalization and Sustainable Communities

OP participates in several Interagency Working Groups (IWG) and Interagency Policy Committees (IPC), including the Rural Prosperity IPC, Food Strategy IPC, and the Coal and Powerplant Communities IWG. These interagency efforts support improving community outcomes on a range of issues including climate resilience, economic transition, diversification, prosperity, and environmental protection. These work groups have grown out of recent executive orders and policy initiatives taken on by the Administration. OP works collaboratively with national program offices and EPA regions to support their involvement in these interagency efforts so that the full range of EPA equities are at the table and engaged to advance Administration priorities.

As part of the Coal and Power Communities Interagency Work group (IWG), OP is working closely with the eleven other federal agencies to support coal, oil and gas, and power plant communities to create good-paying union jobs, spur economic revitalization, remediate environmental degradation, and support energy workers. OP is actively participating in the IWG's working group activities, including community engagement, integration, policy, and investments. OP also is supporting the efforts of the IWG by engaging with EPA's regional offices (particularly

R3 and R5) as well as national programs to support the Administration's efforts to help coal and power plant communities transition their economies.

The EPA Administrator co-chairs a new Extreme Heat IWG and OP's Associate Administrator is co-leading the work group with colleagues from HHS and NOAA with over a dozen federal agencies and White House participation. OP also is working alongside OAR and OEJ to contribute knowledge and experience related to smart growth and green infrastructure on climate adaptation approaches to help communities reduce the occurrence and impact of extreme heat (advancing both climate adaptation and mitigation).

OP is working with EPA's Office of Air and Radiation, DOT, and DOE to explore interagency approaches that advance the Administration's priorities and Presidential commitments on electric vehicles. This work has a specific emphasis on helping communities distribute charging infrastructure equitably, in low-income neighborhoods in both rural and urban areas.

OP has several inter-agency efforts on priority projects funded through the American Rescue Plan. OP is working with DOT and HUD to ensure that infrastructure funding investments advance communities' visions and priorities. OP also is working with federal partners to advance community-level efforts to simultaneously advance community priorities climate goals. Both of these projects model the application of a community-driven approach to efficiently advance agencies' mission. They also demonstrate an effective way to advance the goals outlined in EO 14008 on addressing the climate crisis and environmental justice.

OP is the lead on EPA's Memorandum of Agreement with FEMA, which allows the two agencies to work together to help communities become safer, healthier, and more resilient. The agencies collaborate to help communities hit by disasters rebuild in ways that protect the environment, create long-term economic prosperity, and enhance neighborhoods. FEMA and EPA also help communities incorporate strategies, such as green infrastructure, into their hazard mitigation plans and direct development away from vulnerable areas. EPA and FEMA are using the lessons they learn from working together under this agreement and with other federal agencies to better coordinate assistance to communities on hazard mitigation planning, climate adaptation actions, and post-disaster recovery. OP coordinates closely with all 10 Regions and many National Programs on this partnership.

OP is using an interagency agreement with GSA to update the Smart Location Calculator to give the federal government more information to guide decisions about locating new federal investments. GSA and EPA also are collaborating on development and technical assistance around a new site selection support tool to help GSA and other federal agencies make decisions on where to site new government facilities informed by the cost local and state governments would likely incur to provide infrastructure and services. The tool will be based on known relationships between the built environment and the cost to provide infrastructure for a site and related costs for operation and maintenance over time. EPA also has historically coordinated with GSA on their Good Neighbor Program by helping communities leverage major federal investments, such as courthouses or ports of entry, to focus on downtown revitalization.

OP has in the past and continues to coordinate with agencies and departments that work in communities across the country. This has been through formal and semi-formal arrangements like the HUD-DOT-EPA Partnership for Sustainable Communities (PSC) and Strong Cities, Strong Communities (SC2). Further, OP has a number of Interagency Agreements (IA) and Memoranda of Agreements to partner with other agencies on technical assistance in areas like disaster recovery, capacity building at the community level, and economic revitalization that supports improved environmental and human health results. Partnering agencies include and have included: USDA (Rural Development, Forest Service, Agricultural Marketing Service), DOT, FEMA, GSA, HUD, HHS, Appalachian Regional Commission, Northern Border Regional Commission, Delta Regional Authority, and EDA. These agencies often participate in community workshops that OP offers through technical assistance programs such as: Local Foods, Local Places, Building Blocks, and Recreation Economy for Rural Communities.

Interagency Policy Committees

EPA participates in interagency groups and collaborates with federal partners on the implementation of Executive Orders including EO 14017 on *America's Supply Chains*, Climate Innovation, Climate and Economics, and the US-EU Summit on Trade and Technology Council. EPA is working with NSC, NEC, CEQ, DOC, DOE, DOD, State, and other agencies on supply chain issues associated with semiconductors, critical minerals, EV batteries, and other critical materials. EPA also actively participates on the Federal Permitting Improvement Steering Council, the White House Task Force on Worker Organizing and Empowerment and the Interagency Policy Committee (IPC) on Workforce Development and the White House Gender Policy Council.

Interagency Council on Statistical Policy

The Interagency Council on Statistical Policy (ICSP) is the coordinating body for the Federal Statistical System and plays a leading role in implementing the Evidence Act and advancing the Federal Data Strategy. The ICSP sets strategic goals for modernizing agency statistical practices and products and advances those goals through cross-agency collaborations on strategic initiatives. EPA will continue to work with the ICSP to advance the Federal statistics and availability of robust information to support evidence-based policy.

The Inspector General

Work with the Council of Inspectors General on Integrity and Efficiency (CIGIE)

EPA's Inspector General is a member of the Council of Inspectors General on Integrity and Efficiency (CIGIE), an organization comprised of federal Inspectors General (IGs), GAO, and the FBI. The CIGIE coordinates and improves the way IGs conduct audits, investigations, and internal operations. The CIGIE also promotes joint projects of government-wide interest and reports annually to the President on the collective performance of the IG community.

Activity Coordination, Information Exchange, and Training

EPA's OIG coordinates criminal investigative activities with other law enforcement organizations such as the FBI, Secret Service, and DOJ. In addition, the OIG participates with various intergovernmental audit forums and professional associations to exchange information, share best practices, and obtain or provide training. The OIG also promotes collaboration among EPA's partners and stakeholders in its participation of disaster response and its outreach activities.

Collaborative Work with Inspectors General and Other Partners

EPA's OIG initiates and participates in collaborative audits, program evaluations, and investigations with OIGs of agencies with an environmental mission such as the DOI, USDA, as well as other federal, state, and local law enforcement agencies as prescribed by the IG Act, as amended.

Statutory Duties

As required by the IG Act, EPA's OIG coordinates and shares information with the GAO. EPA's OIG currently serves as the Inspector General of the U.S. Chemical Safety and Hazard Investigations Board (CSB). EPA's OIG will continue to perform its duties with respect to the CSB until otherwise directed.

Environmental Protection Agency Acronyms for Statutory Authority

The following is not an exhaustive list of [U.S.] statutory authorities but includes those commonly referred to by acronym in this document.

ACE: Air, Climate, and Energy

ADA: Americans with Disabilities Act

ADEA: Age Discrimination in Employment Act

AEA: Atomic Energy Act, as amended, and Reorganization Plan #3

AHERA: Asbestos Hazard Emergency Response Act

AHPA: Archaeological and Historic Preservation Act

AIM: American Innovation and Manufacturing Act of 2019

APA: Administrative Procedures Act

ARP: American Rescue Plan

ARRA: American Recovery and Reinvestment Act

ASHAA: Asbestos in Schools Hazard Abatement Act

ASTCA: Antarctic Science, Tourism, and Conservation Act

AWIA: America's Water Infrastructure Act of 2018

BEACH Act of 2000: Beaches Environmental Assessment and Coastal Health Act

BRERA: Brownfields Revitalization and Environmental Restoration Act

BUILD Act: Brownfields Utilization, Investment, and Local Development Act

CAA: Clean Air Act

CAAA: Clean Air Act Amendments (1970 and 1990)

CARES: Coronavirus Aid, Relief, and Economic Security Act

CCA: Clinger Cohen Act

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act (1980)

CFOA: Chief Financial Officers Act

CICA: Competition in Contracting Act

CRA: Civil Rights Act

CSA: Computer Security Act

CWA: Clean Water Act (1972)

CWPPR: Coastal Wetlands Planning, Protection, and Restoration Act of 1990

CZARA: Coastal Zone Act Reauthorization Amendments

CZMA: Coastal Zone Management Act

DERA: Diesel Emissions Reduction Act

DPA: Deepwater Ports Act

DREAA: Disaster Relief and Emergency Assistance Act

DWWIA: Drinking Water and Wastewater Infrastructure Act of 2021

ECRA: Economic Cleanup Responsibility Act

EFOIA: Electronic Freedom of Information Act

EISA: Energy Independence and Security Act of 2007

EO: Executive Order

EPAct: Energy Policy Act of 2005

EPAA: Environmental Programs Assistance Act

EPCA: Energy Policy and Conservation Act

EPCRA: Emergency Planning and Community Right to Know Act (1986)

ERDDAA: Environmental Research, Development and Demonstration Authorization Act

ESA: Endangered Species Act

ESECA: Energy Supply and Environmental Coordination Act

FACA: Federal Advisory Committee Act

FAIR: Federal Activities Inventory Reform Act

FASA: Federal Acquisition Streamlining Act (1994)

FCMA: Fishery Conservation and Management Act

FEPCA: Federal Environmental Pesticide Control Act of 1972, enacted as amendments to FIFRA

FFATA: Federal Funding Accountability and Transparency Act of 2006

FFDCA: Federal Food, Drug, and Cosmetic Act

FFMIA: Federal Financial Management Improvement Act of 1996

FGCAA: Federal Grant and Cooperative Agreement Act

FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act (1972)

FISMA: Federal Information Security Modernization Act

FITARA: Federal Information Technology Acquisition Reform Act

FLPMA: Federal Land Policy and Management Act

FMFIA: Federal Managers' Financial Integrity Act (1982)

FOIA: Freedom of Information Act

FPA: Federal Pesticide Act

FPAS: Federal Property and Administration Services Act

FQPA: Food Quality Protection Act (1996)

FRA: Federal Register Act

FSA: Food Security Act

FSMA: Food Safety Modernization Act

FTTA: Federal Technology Transfer Act

FUA: Fuel Use Act

FWCA: Fish and Wildlife Coordination Act

FWPCA: Federal Water Pollution and Control Act (also known as the Clean Water Act [CWA])

GISRA: Government Information Security Reform Act

GMRA: Government Management Reform Act

GPRA: Government Performance and Results Act (1993)

GPRAMA: Government Performance and Results Modernization Act of 2010

HMTA: Hazardous Materials Transportation Act

HSWA: Hazardous and Solid Waste Amendments of 1984, enacted as amendments to RCRA

IGA: Inspector General Act

IIJA: Infrastructure Investment and Jobs Act

IPA: Intergovernmental Personnel Act

IPIA: Improper Payments Information Act

ISTEA: Intermodal Surface Transportation Efficiency Act

IT: Information Technology

ITMRA: Information Technology Management Reform Act of 1996-aka Clinger/Cohen Act

MCRBMA: Mercury-Containing and Rechargeable Battery Management Act

MGT: Modernizing Government Technology Act

MPPRCA: Marine Plastic Pollution, Research and Control Act of 1987

MPRSA: Marine Protection Research and Sanctuaries Act

NAWCA: North American Wetlands Conservation Act

NEEA: National Environmental Education Act

NEPA: National Environmental Policy Act

NHPA: National Historic Preservation Act

NISA: National Invasive Species Act of 1996

ODA: Ocean Dumping Act

OPA: Oil Pollution Act of 1990

OWBPA: Older Workers Benefit Protection Act

PBA: Public Building Act

PFCRA: Program Fraud Civil Remedies Act

PHSA: Public Health Service Act

PLIRRA: Pollution Liability Insurance and Risk Retention Act

PPA: Pollution Prevention Act

PR: Privacy Act of 1974

PRA: Paperwork Reduction Act

PREA: Pesticide Registration Extension Act of 2012 (also known as PRIA 3)

PRIA: Pesticide Registration Improvement Act of 2003

PRIA 4: Pesticide Registration Improvement Extension Act of 2018

PRIRA: Pesticide Registration Improvement Renewal Act

QCA: Quiet Communities Act

RCRA: Resource Conservation and Recovery Act of 1976, enacted as amendments to SWDA

RFA: Regulatory Flexibility Act

RICO: Racketeer Influenced and Corrupt Organizations Act

RLBPHRA: Residential Lead-Based Paint Hazard Reduction Act

SARA: Superfund Amendments and Reauthorization Act of 1986

SBLRBRERA: Small Business Liability Relief and Brownfields Revitalization and

Environmental Restoration Act

SBREFA: Small Business Regulatory Enforcement Fairness Act of 1996

SDWA: Safe Drinking Water Act

SICEA: Steel Industry Compliance Extension Act

SMCRA: Surface Mining Control and Reclamation Act

SOS 2.0: Save Our Seas Act 2.0

SPA: Shore Protection Act of 1988

SWDA: Solid Waste Disposal Act

TSCA: Toxic Substances Control Act

UMRA: Unfunded Mandates Reform Act

UMTRLWA: Uranium Mill Tailings Radiation Land Withdrawal Act

USMCA: United States-Mexico-Canada Agreement Implementation Act

USTCA: Underground Storage Tank Compliance Act

VIDA: Vessel Incidental Discharge Act

WIFIA: Water Infrastructure Finance and Innovation Act

WIIN: Water Infrastructure Improvements for the Nation Act

WQA: Water Quality Act of 1987

WRDA: Water Resources Development Act

WSRA: Wild and Scenic Rivers Act

WWWQA: Wet Weather Water Quality Act of 2000

Making Litigation Costs Transparent- Equal Access for Justice Act (EAJA)⁷ FY 2021

Date of final fee agreement or court disposition	Case Name	Court	Case Number	Judge	Amount of Fees and/or Costs Paid	Source of Funds	Was amount negotiated or court ordered?	Recipients	Nature of Case and Findings Basis	Hourly Rate of Attorney ⁸	Hourly Rate of Expert Witness
8/13/2021	Californians for Renewable Energy, et al. v. EPA	U.S. District Court for the Northern District of California Oakland Division	4:15-ev- 03292- SBA	Judge Saundra B. Armstrong	\$850,000	EPA Appropriations	Negotiated	Earthjustice	Five claims of unreasonable delay/agency action unlawfully withheld for failure to meet the regulatory deadline and one claim alleging a pattern and practice of unreasonable delay/agency action unlawfully withheld under \$706(1) of the Administrative Procedures Act (APA). Failure to meet regulatory deadline found to be unreasonable delay/agency action unlawfully withheld.	N/A	None
7/26/2021	Physicians for Social Responsibility, et al. v. EPA	U.S. District Court for the District of Columbia	1:17-cv- 02742	Judge Trevor N. McFadden	\$126,916	EPA Appropriations	Negotiated	Earthjustice	Plaintiffs' claimed that the Administrator's October 31, 2017 Directive banning EPA grant recipients from serving on EPA advisory committees is arbitrary and capricious and violates uniform federal ethics requirements issued by the Office of Government Ethics, FACA, and EPA statutes defining membership requirements on EPA federal advisory committees. Directive: (1) is reviewable under the APA because FACA's implementing regulations provide	N/A	None

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⁷ In the FY 2019 Explanatory Statement accompanying the Consolidated Appropriations Act, 2019 (P.L. 116-6), the House and Senate Committees on Appropriations requested Department of Interior, EPA, and the Forest Service make publicly available the EAJA fee information as specified in the explanatory statement accompanying Division G of the Consolidated Appropriations Act, 2017 (P.L. 115-31).

⁸ In prior reports, EPA included the hourly rates used in the plaintiffs' fee requests. However, EPA has concluded that it is not accurate to link rates from initial fee applications to the lump-sum amounts when final EAJA fees are the result of negotiated settlements (as is the case with all of the entries in this spreadsheet). In those situations, it is not possible to determine the hourly rates implicated in the final EAJA payments.

Date of final fee agreement or court disposition	Case Name	Court	Case Number	Judge	Amount of Fees and/or Costs Paid	Source of Funds	Was amount negotiated or court ordered?	Recipients	Nature of Case and Findings Basis	Hourly Rate of Attorney ⁸	Hourly Rate of Expert Witness
									law to apply; (2) is not contrary to law merely because it differs from the OGE uniform federal ethics regulations; (3) is arbitrary and capricious because it did not provide a reasoned explanation for EPA's change in policy; and (4) is a supplemental agency ethics regulation and therefore should have undergone the supplementation process outlined in the OGE regulations.		
8/30/2021	Sierra Club v. Pirzadeh	United States District Court, Western District of Washington	2:11-ev- 01759	Judge Barbara J. Rothstein	\$89,950	EPA Appropriations	Negotiated	Sierra Club and Center for Environme ntal Law and Policy	Alleging arbitrary and capricious action in consideration of whether "constructive submission" had occurred with respect to a TMDL for PCBs in the Spokane River. Matter remanded to EPA with instructions to develop a plan and schedule for development of a TMDL.	N/A	None
7/30/2021	San Francisco Baykeeper, et al. v. EPA, et al.	U.S. District Court for the Northern District of California	3:19-ev- 05941	Judge William H. Alsup	\$416,913	EPA Appropriations	Negotiated	Cotchett, Pitre & McCarthy, LLP	Plaintiffs challenged EPA's special-case Clean Water Act jurisdictional determination dated March 1, 2019, for the Redwood City Salt Plant site as arbitrary, capricious, or contrary to law under the Administrative Procedure Act. Plaintiffs brought a single claim for relief, challenging EPA's negative jurisdictional determination under the Clean Water Act for the Redwood City salt ponds and asking this Court to vacate and set aside that decision. The district Court granted Plaintiffs' motion for summary judgment on that claim and denied EPA and intervenors' motion. In ruling for Plaintiffs, this Court held that EPA had erroneously applied the	N/A	None

Date of final fee agreement or court disposition	Case Name	Court	Case Number	Judge	Amount of Fees and/or Costs Paid	Source of Funds	Was amount negotiated or court ordered?	Recipients	Nature of Case and Findings Basis	Hourly Rate of Attorney ⁸	Hourly Rate of Expert Witness
									law and vacated and remanded the jurisdictional determination.		
7/30/2021	San Francisco Baykeeper, et al. v. EPA, et al.	U.S. District Court for the Northern District of California	3:19-ev- 05941	Judge William H. Alsup	\$214,980	EPA Appropriations	Negotiated	Earthrise Law Center	Plaintiffs challenged EPA's special-case Clean Water Act jurisdictional determination dated March 1, 2019, for the Redwood City Salt Plant site as arbitrary, capricious, or contrary to law under the Administrative Procedure Act. Plaintiffs brought a single claim for relief, challenging EPA's negative jurisdictional determination under the Clean Water Act for the Redwood City salt ponds and asking this Court to vacate and set aside that decision. The district Court granted Plaintiffs' motion for summary judgment on that claim and denied EPA and intervenors' motion. In ruling for Plaintiffs, this Court held that EPA had erroneously applied the law and vacated and remanded the jurisdictional determination.	N/A	None
7/30/2021	San Francisco Baykeeper, et al. v. EPA, et al.	U.S. District Court for the Northern District of California	3:19-cv- 05941	Judge William H. Alsup	\$64,400	EPA Appropriations	Negotiated	San Francisco Baykeeper	Plaintiffs challenged EPA's special-case Clean Water Act jurisdictional determination dated March 1, 2019, for the Redwood City Salt Plant site as arbitrary, capricious, or contrary to law under the Administrative Procedure Act. Plaintiffs brought a single claim for relief, challenging EPA's negative jurisdictional determination under the Clean Water Act for the Redwood City salt ponds and asking this Court to vacate and set aside that decision. The district Court granted Plaintiffs' motion for summary judgment on that claim and denied EPA and	N/A	None

Date of final fee agreement or court disposition	Case Name	Court	Case Number	Judge	Amount of Fees and/or Costs Paid	Source of Funds	Was amount negotiated or court ordered?	Recipients	Nature of Case and Findings Basis	Hourly Rate of Attorney ⁸	Hourly Rate of Expert Witness
									intervenors' motion. In ruling for Plaintiffs, this Court held that EPA had erroneously applied the law and vacated and remanded the jurisdictional determination.		
2/24/2021	Friends of Animals v. Pruitt, et al.	U.S. District Court for the District of Oregon Pendleton Division	2:17-cv- 01410	Magistrate Judge Patricia Sullivan	\$87,000	EPA Appropriations	Negotiated	Friends of Animals	Plaintiffs challenged EPA's 2016 denial of their 2015 petition to initiate special review for a horse contraceptive pesticide product (Zona-Stat-H), as arbitrary and capricious. The court found that EPA's petition denial was arbitrary and capricious in that it did not adequately respond to Plaintiff's allegations based on 40 CFR 154.7(a)(6), which permits SR if the pesticide "[m]ay otherwise pose a risk to humans or to the environment which is of sufficient magnitude to merit" SR. The court also found it impermissible for EPA to defer to wild horse managers to determine whether and when to use Zona-Stat-H as a basis for considering the criteria in 40 CFR 154.7(a)(6), and remanded the case back to EPA.	N/A	None

FY 2023 Congressional	Justification Estimate	d Resources and FTE for	Environmental Justice Pr	rogram ¹
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Dollar in Thousands

Appropriation	Program Activities	FY 2023 CJ Estimated Resources ²	FY 2023 CJ Estimated FTE
EPM	HQ Environmental Justice (EJ) Program Management and Coordination ³	\$101,537.0	92.3
EPM	EJSCREEN	\$5,900.0	4.0
EPM	White House (WH) EJ Inter-Agency Council (formerly EJ IWG) Support and EJ coordination with Other Federal Agencies	\$3,000.0	3.0
EPM	National EJ Advisory Council/WHEJ Advisory Council Support, and Climate EJ Advisory Council	\$4,000.0	5.0
EPM	Environmental Justice Competitive Grant Program ⁴	\$50,000.0	5.0
EPM	Environmental Justice Community Grant Program ⁵	\$25,000.0	3.0
EPM	Environmental Justice State Grant Program	\$25,000.0	3.0
EPM	Tribal Environmental Justice Grant Program	\$25,000.0	3.0
EPM	Community-based Participatory Research Grant Program	\$15,000.0	2.0
EPM	Environmental Justice Training Program	\$10,000.0	3.0
EPM	Environmental Justice Clearinghouse	\$5,000.0	3.0
EPM	Environmental Justice Legal Support	\$4,000.0	3.0
EPM	Regional Outreach Centers	\$10,000.0	12.0
EPM	Regional Resources for Environmental Justice Program	\$11,501.0	65.1
Subi	total of EPM Environmental Justice Resources and FTE	\$294,938.0	206.4
Superfund	Superfund Environmental Justice Program Coordination	\$5,876.0	5.5
Subtotal d	of Superfund Environmental Justice Resources and FTE	\$5,876.0	5.5
Total FY 2023 CJ E Justice Program	stimated Resources and FTE for Environmental	\$300,814.0	211.9

¹ The Explanatory Statement accompanying the Consolidated Appropriations Act, 2021 instructs EPA to provide "allocations for each component of funding for environmental justice programs". Please see page 228: https://www.govinfo.gov/content/pkg/CREC-2020-12-21/pdf/CREC-2020-12-21-house-bk4.pdf.

²Estimated program activity resources include both payroll and non-payroll resources.

³The former Agency Technical Assistance, Research, Training, Education, and Communication program activity has been incorporated into the HQ Environmental Justice (EJ) Program Management and Coordination program activity.

⁴The Environmental Justice Collaborative Problem-Solving Cooperative Agreements has been renamed as the Environmental Justice Competitive Grant Program.

⁵The Environmental Justice Small Grants has been renamed as the Environmental Justice Community Grant Program.

EPA Budget by National Program Manager and Major Office

Dollars in Thousands

			FY 2023 Presid	dent's Budget	
NPM	Major Office	Pay (\$K)	Non-Pay (\$K)	Total (\$K)	FTE
OA	Immediate Office	\$7,687	\$6,431	\$14,118	46.5
	Office of Congressional and Intergovernmental Relations	\$8,174	\$902	\$9,076	44.2
	Office of Public Affairs	\$5,803	\$322	\$6,124	30.5
	Office of Public Engagement	\$1,201	\$83	\$1,284	8.0
	Office of Policy	\$29,121	\$22,999	\$52,120	160.1
	Children's Health Protection	\$2,678	\$2,454	\$5,131	13.1
	Environmental Education	\$970	\$7,055	\$8,024	5.2
	Office of Civil Rights	\$3,433	\$473	\$3,906	20.9
	Executive Secretariat	\$3,915	\$149	\$4,064	20.1
	Executive Services	\$3,041	\$318	\$3,359	14.9
	Homeland Security	\$2,546	\$508	\$3,054	12.3
	Science Advisory Board	\$3,294	\$736	\$4,030	18.7
	Small and Disadvantaged Business Utilization	\$2,027	\$1,118	\$3,145	9.7
	Regional Resources	\$46,658	\$24,413	\$71,071	259.9
	OA TOTAL	\$120,547	\$67,960	\$188,507	664.1
OEJ	Immediate Office	\$476	\$1,220	\$1,696	1.0
	Environmental Justice	\$21,465	\$264,137	\$285,602	133.8
	Civil Rights Compliance	\$5,945	\$2,100	\$8,045	31.9
	Regional Resources	\$20,750	\$2,144	\$22,894	122.9
	OEJ TOTAL	\$48,636	\$269,601	\$318,237	289.6
		, ,,,,,	,,	12 2, 2	
OAR	Immediate Office	\$10,878	\$217,431	\$228,309	57.7
	Office of Air Quality Planning and Standards	\$73,048	\$176,467	\$249,516	411.0
	Office of Atmospheric Programs	\$49,562	\$119,058	\$168,620	272.4
	Office of Transportation and Air Quality	\$72,380	\$236,951	\$309,331	380.3
	Office of Radiation and Indoor Air	\$35,469	\$22,260	\$57,729	195.4
	Regional Resources	\$118,163	\$195,783	\$313,946	676.4
	OAR TOTAL	\$359,501	\$967,951	\$1,327,452	1,993.2
OCFO	Immediate Office	\$2,041	\$5,026	\$7,067	11.0
	Office of Budget	\$7,884	\$2,526	\$10,410	43.0
	Office of Planning, Analysis and Accountability	\$4,638	\$295	\$4,933	25.5
	Office of Technology Solutions	\$9,350	\$25,209	\$34,559	50.5
	Office of Resource and Information Management	\$2,690	\$5,254	\$7,944	14.8
	Office of the Controller	\$25,471	\$2,109	\$27,580	135.4
	OCFO eEnterprise	\$1,211	\$549	\$1,761	5.0
	Office of Continuous Improvement	\$2,241	\$451	\$2,692	10.0
	Regional Resources	\$34,820	\$2,267	\$37,087	206.3
	OCFO TOTAL	\$90,346	\$43,687	\$134,033	501.5
OCSPP	Immediate Office	\$2,402	\$1,227	\$3,628	12.0
	Office of Pesticide Programs	\$63,479	\$26,576	\$90,055	349.0
	Office of Pollution Prevention and Toxics	\$82,893	\$53,861	\$136,754	495.5
	Office of Program Support	\$35,604	\$3,271	\$38,875	183.0
	Regional Resources	\$25,090	\$44,868	\$69,958	151.8
	OCSPP TOTAL	\$209,467	\$129,803	\$339,270	1,191.3

			FY 2023 Presi	dent's Budget	
NPM	Major Office	Pay (\$K)	Non-Pay (\$K)	Total (\$K)	FTE
OECA	Immediate Office	\$7,117	\$2,957	\$10,074	42.9
	Office of Civil Enforcement	\$27,271	\$23,441	\$50,713	131.2
	Office of Criminal Enforcement, Forensics, and Training	\$70,736	\$10,698	\$81,434	336.1
	Office of Compliance	\$22,897	\$57,172	\$80,069	120.2
	Federal Facilities Enforcement Office	\$2,967	\$1,257	\$4,224	15.4
	Office of Site Remediation Enforcement	\$14,301	\$23,139	\$37,440	70.5
	Regional Resources	\$320,116	\$58,576	\$378,692	1,844.4
	OECA TOTAL	\$465,406	\$177,240	\$642,646	2,560.7
OGC	Immediate Office	\$3,920	\$81	\$4,001	17.2
000	Air and Radiation Law Office	\$11,769	\$23	\$11,792	48.0
	Pesticides and Toxic Substances Law Office	\$4,710	\$16	\$4,726	22.5
	Solid Waste and Emergency Response Law Office	\$5,438	\$218	\$5,656	23.0
	Water Law Office	\$5,889	\$143	\$6.032	24.0
	Civil Rights - Title VI	\$0	\$0	\$0	0.0
	Other Legal Support	\$20,317	\$10,877	\$31,194	93.5
	Regional Resources	\$35,166	\$762	\$35,928	159.9
	OGC TOTAL	\$87,209	\$12,120	\$99,329	388.1
OIG	Immediate Office	\$836	\$197	\$1,033	5.0
	Office of Chief of Staff	\$2,640	\$623	\$3,263	16.0
	Office of Counsel	\$4,014	\$948	\$4,962	24.0
	Office of Management	\$6,874	\$1,623	\$8,497	41.0
	Office of Audit	\$21,271	\$4,973	\$26,243	113.0
	Office of Evaluations	\$9,514	\$2,246	\$11,760	43.0
	Office of Investigations	\$9,844	\$2,324	\$12,168	59.0
	OIG TOTAL	\$54,992	\$12,935	\$67,927	301.0
OITA	Immediate Office	\$973	\$142	\$1,115	5.0
UIIA	Office of International Affairs	\$8,732	\$5,930	\$1,113	44.0
	Office of Management and International Services	\$2,494	\$779	\$3,273	12.8
	American Indian Environmental Office	\$3,741	\$619	\$4,360	19.3
	Regional Resources	\$13,421	\$85,776	\$99,197	78.6
	OITA TOTAL	\$29,361	\$93,246	\$122,607	159.7
	I	4	1 1	4	
OLEM	Immediate Office	\$8,730	\$5,181	\$13,911	40.8
	Federal Facilities Restoration and Reuse Office	\$3,188		\$10,593	16.2
	Office of Communication, Partnership, and Analysis	\$2,538	-	\$4,093	13.8
	Office of Superfund Remediation and Technology Innovation	\$27,393	\$116,276	\$143,669	144.3
	Office of Resource Conservation and Recovery	\$27,085	\$30,768	\$57,853	147.0
	Office of Underground Storage Tanks	\$4,055	\$3,175	\$7,229	22.6
	Office of Brownfields and Land Revitalization	\$2,939	\$13,215	\$16,154	16.6
	Office of Mountains, Decerts, and Plains	\$14,301	\$41,542	\$55,842	72.8
	Office of Mountains, Deserts, and Plains Regional Resources	\$886	\$0	\$886	4.0
		\$303,822	\$704,320	\$1,008,142	1,738.0
	OLEM TOTAL	\$394,937	\$923,437	\$1,318,374	2,216.1

			FY 2023 Presid	dent's Budget	
NPM	Major Office	Pay (\$K)	Non-Pay (\$K)	Total (\$K)	FTE
OMS	Immediate Office	\$15,797	\$57,760	\$73,558	89.6
	Environmental Appeals Board	\$3,375	\$163	\$3,538	15.0
	Administrative Law Judges	\$2,239	\$161	\$2,400	11.0
	Office of Human Resources	\$30,465	\$9,240	\$39,705	153.7
	OARM - Research Triangle Park	\$15,742	\$27,324	\$43,066	100.0
	Office of Grants and Debarment	\$15,948	\$4,317	\$20,265	87.0
	OARM - Cincinnati	\$10,960	\$8,505	\$19,464	70.0
	Office of Administration	\$21,878	\$351,961	\$373,840	97.5
	Office of Acquisition Solutions	\$43,926	\$6,647	\$50,573	248.1
	Office of Enterprise Information Programs	\$7,973	\$7,867	\$15,841	40.1
	Office of Information Management	\$11,543	\$33,472	\$45,015	58.7
	Office of Digital Services & Technical Architecture	\$4,437	\$1,655	\$6,093	23.0
	Office of Customer Advocacy, Policy & Portfolio Management	\$5,827	\$2,076	\$7,903	31.0
	Office of Information Security & Privacy	\$3,566	\$27,955	\$31,522	18.1
	Office of Information Technology Operations	\$2,036	\$12,189	\$14,225	9.7
	Regional Resources	\$91,785	\$52,587	\$144,372	508.3
	OMS TOTAL	\$287,499	\$603,880	\$891,379	1,560.8
ORD	ORD Headquarters	\$45,922	\$74,230	\$120,152	256.2
	Center for Computational Toxicology & Exposure	\$46,701	\$35,725	\$82,425	261.6
	Center for Environmental Measurements & Modeling	\$70,850	\$47,962	\$118,811	394.9
	Center for Public Health & Environmental Assessment	\$71,944	\$44,423	\$116,367	397.5
	Center for Environmental Solutions & Emergency	\$46,251	\$38,505	\$84,756	259.5
	Office of Science Advisor, Policy and Engagement	\$13,016	\$51,572	\$64,588	72.6
	Regional Resources	\$34,904	\$21,990	\$56,894	209.5
	ORD TOTAL	\$329,587	\$314,406	\$643,993	1,851.8
0144	Liver the office	¢42.000	Ć44 020 I	¢24.020	64.0
ow	Immediate Office	\$13,000	\$11,839	\$24,839	64.8
	Office of Ground Water and Drinking Water	\$41,520	\$234,418	\$275,938	228.8
	Office of Science and Technology	\$25,002	\$43,418	\$68,421	127.6
	Office of Wastewater Management	\$38,724	\$647,099	\$685,823	213.6
	Office of Wetlands, Oceans and Watersheds	\$22,433	\$63,286	\$85,719	116.3
	Regional Resources	\$220,842	\$4,425,505	\$4,646,347	1,309.6
	OW TOTAL	\$361,522	\$5,425,565	\$5,787,087	2,060.7
	Subtotal Agency Resources	\$2,839,010	\$9,041,831	\$11,880,841	15,738.6
	Less Rescission of Prior Year Funds	\$0	\$0	\$0	0.0
	Reimbursable FTE				465.5
	Total Agency Resources	\$2,839,010	\$9,041,831	\$11,880,841	16,204.1

EPA User Fee Programs

In FY 2023, EPA will have several user fee programs in operation. These user fee programs and proposals are referenced below. EPA will continue to review whether fees should be assessed for programs that provide special benefits to recipients beyond those that accrue to the general public, in accordance with OMB Circular A-25.

Current Fees: Pesticides

Fee collection authority exists under the Federal Insecticide, Fungicide, and Rodenticide Act of 1988, as amended by the Pesticide Registration Improvement Extension Act of 2018 (P. L. 116-8) ("PRIA-4"), which was passed in March 2019. PRIA-4 reauthorizes these fee authorities through Fiscal Year 2023 and adjusts fee amounts for certain registration activities.

• Pesticides Maintenance Fee (7 U.S.C. §136a-1(i))

The Maintenance Fee provides funding for the registration review programs and a certain percentage supports the processing of applications involving inert ingredients and expedited processing of some applications, such as fast track amendments. PRIA-4 reauthorizes collection of this fee through FY 2023 and raises the collection target by \$3.2 million to an average collection of \$31 million over five years of PRIA-4 authorization.

• Enhanced Registration Services (7 U.S.C. §136w-8(b))

Entities seeking to register pesticides for use in the United States pay a fee at the time the registration action request is submitted to EPA, setting specific timeframes for the registration decision service. This process has introduced new pesticides to the market more quickly. PRIA-4 reauthorizes collection of these fees through FY 2023 and adjusts fee amounts for certain types of registrations. In FY 2023, EPA expects to collect approximately \$20 million from this fee program.

Current Fees: Other

• Clean Air Part 71 Operating Permits Program

Title 40 CFR Part 71 § 71.9 authorizes and establishes requirements for the Clean Air Part 71 program - a comprehensive Federal air quality operating permit program for air pollution control agencies that do not have a delegated Title V program on charging and collecting user fees, as required by Section 502(b)(3) of the Clean Air Act. All sources subject to the operating permit requirements of Title V shall have a permit to operate that assures compliance with all applicable requirements. The owners or operators shall pay annual fees that are sufficient to cover the permit program costs, in accordance with the procedures described in this section.

• Service Fees for the Administration of the Toxic Substances Control Act (TSCA Fees Rule)

On June 22, 2016, the "Frank R. Lautenberg Chemical Safety for the 21st Century Act" (P.L. 114-182) was signed into law, amending numerous sections of TSCA, including providing authority for the establishment of a new, broader TSCA User Fee program that replaces and expands the former Section 5 Pre-Manufacturing Notification Fee. Section 26 of TSCA authorizes EPA to collect user fees to offset 25 percent of the Agency's full costs for implementing TSCA Sections 4, 5, 6, and 14. Fees are charged for: issuance of Test Orders, Test Rules and Enforceable Consent Agreements under TSCA Section 4; submission of Pre-Manufacturing Notices, Significant New Use Notices and Microbial Commercial Activity Notices and certain submissions for exemptions under TSCA Section 5; and development of EPA-Initiated Risk Evaluations and Manufacturer-Requested Risk Evaluations (MRREs) under TSCA Section 6.

EPA promulgated the TSCA User Fee Rule in October 2018¹⁰ and collected \$2.79 million in fee revenue in FY 2019 from Section 5 submissions. In FY 2020, the Agency collected \$3.09 million in fee revenue from Section 5 submissions as well as \$2.5 million from two Section 6 MRREs for chemicals within the TSCA Work Plan (Di-isodecyl Phthalate [DIDP] and Diisononyl Phthalate [DINP]). In FY 2021, the Agency collected \$28.65 million: \$3.35 million from Section 5, \$24.05 million from 19 of the 20 Section 6 EPA-Initiated Risk Evaluations, and \$1.25 million from one Section 6 MRRE for a TSCA Work Plan chemical (Octamethylcyclotetrasiloxane [D4]). (The Agency invoiced \$88.2 thousand for Section 4 Test Orders in FY 2020 and FY 2021, but did not start receiving submissions until FY 2022.) Because nearly \$17 million of the collections for the 19 Section 6 Risk Evaluations was not due to be paid until September 2, 2021, those funds were not accessible to EPA until early FY 2022. EPA expects to collect approximately \$5.0 million in FY 2022 (\$1.6 million from the remaining Section 6 EPA-Initiated Risk Evaluations invoices and \$3.4 million from Section 5 submissions and Section 4 Test Orders) and \$4.65 million in FY 2023 (\$3.4 million in Section 5 submissions and Section 4 Test Orders and an additional amount from one TSCA Section 6 Manufacturer-Requested Risk Evaluation at \$1.25 million if the MRRE request is granted), all subject to potential fee level changes. EPA will allocate FY 2021 Section 6 collections over the risk evaluation lifecycle (3-3.5 years). TSCA requires EPA to update the Fees every three years. 11 Fees collected/projected to be collected in FY 2019 through FY 2021 equated to approximately 14 percent of associated expenditures for those three fiscal years, below the 25 percent target. EPA proposed revisions to the fee rule in December 2020, but plans to re-propose in light of public comments.

• Motor Vehicle and Engine Compliance Program Fee

This fee is authorized by the Clean Air Act of 1990 and is administered by the Office of Transportation and Air Quality. Fee collections for manufacturers of light-duty vehicles, light- and heavy-duty trucks, and motorcycles began in August 1992. In 2004, EPA promulgated a rule that updated existing fees and established fees for newly regulated vehicles and engines. The fees established for new compliance programs are paid by manufacturers of heavy-duty and nonroad

⁹ TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, Section 26(b)(1) and (4)

¹⁰ https://www.epa.gov/tsca-fees/fees-administration-toxic-substances-control-act

¹¹ https://www.epa.gov/tsca-fees/fees-administration-toxic-substances-control-act

vehicles and engines, including large diesel and gas equipment (earthmovers, tractors, forklifts, compressors, etc.), handheld and non-handheld utility engines (chainsaws, weed-whackers, leaf-blowers, lawnmowers, tillers, etc.), marine (boat motors, watercraft, jet-skis), locomotive, aircraft and recreational vehicles (off-road motorcycles, all-terrain vehicles, snowmobiles) for in-use testing and certification. In 2009, EPA added fees for evaporative emissions requirements for nonroad engines. EPA intends to apply certification fees to additional industry sectors as new programs are developed. In FY 2023, EPA expects to collect approximately \$23.7 million from this fee program based upon a projection of the original rulemaking cost study adjusted for inflation.

Hazardous Waste Electronic Manifest

The Hazardous Waste Electronic Manifest Establishment Act (P. L. 112-195) provides EPA with the authority to establish a program to finance, develop, and operate a system for the electronic submission of hazardous waste manifests supported by user fees. In accordance with the Act, EPA established the e-Manifest program. EPA finalized the user fee rule, *Hazardous Waste Management System: User Fees for the Electronic Hazardous Waste Manifest System and Amendments to Manifest Regulations*, in December 2017, and the e-Manifest system launched in June 2018.

In FY 2023, EPA will continue to operate the e-Manifest system and the Agency anticipates collecting and depositing approximately \$26.6 million in e-Manifest user fees into the Hazardous Waste Electronic Manifest System Fund. Based upon authority to collect and spend e-Manifest fees provided by Congress in annual appropriations bills, the fees will fully support the e-Manifest program, including the operation of the system, necessary program expenses, and future development costs.

Water Infrastructure Finance and Innovation Program Account (WIFIA) Program Fees

The FY 2023 Budget requests authorization for the Administrator to collect and obligate fees established in accordance with Title V, Subtitle C, Sections 5029 and 5030 of Public Law 113-121, the Water Resources Reform and Development Act of 2014. These funds shall be deposited in the Water Infrastructure Finance and Innovation Program Account (WIFIA) and remain available until expended. WIFIA fee regulations were first promulgated in FY 2017. Fee revenue will be used for the cost of contracting with expert services such as financial advisory, legal advisory, and engineering firms.

The requested WIFIA program fee expenditure authority would be in addition to the \$8 million request for administrative and operations expenses. Fee revenue does not take the place of the request for WIFIA administration. The appropriated administrative level and the anticipated fee revenue are both needed to successfully implement the WIFIA program. In FY 2023, EPA estimates that \$10 million in WIFIA fees could be collected.

Fee Proposals: Other

FIFRA and PRIA Fee Spending Restrictions

Current statutory language in the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and Pesticide Registration Improvement Act (PRIA) restricts what activities EPA can fund from collections deposited in the Reregistration and Expedited Processing Revolving Fund and Pesticide Registration Fund. The FY 2023 request carries forward the proposed statutory language from the FY 2022 President's Budget to expand the range of activities that may be funded with these fees. Language for pesticide registration service fees is included in the proposed Administrative Provisions; since pesticide maintenance fees are mandatory, separate language has been prepared for those fees that will be transmitted at a later date.

Expected Benefits of E-Government Initiatives

eRulemaking

The eRulemaking Line of Business is designed to: enhance public access and participation in the regulatory process through electronic systems; reduce the burden on citizens and businesses in finding relevant regulations and commenting on proposed rulemaking actions; consolidate redundant docket systems; and improve agency regulatory processes and the timeliness of regulatory decisions. EPA has served as the managing partner for this Line of Business; however, in FY 2020, EPA transferred management services to the General Services Administration (GSA). EPA continues to be involved as a partner agency.

Fiscal Year	Account Code	EPA Service Fee (in thousands)
2021	020-99-99-99-0060-24	\$1,063.0
2022	020-99-99-99-0060-24	\$1,330.0
2023	020-99-99-99-0060-24	\$1,380.0

Geospatial Line of Business

The Geospatial Line of Business is an intergovernmental project to improve the ability of the public and government to use geospatial information to support the business of government and facilitate decision-making. This initiative reduces costs and improves agency operations in several areas.

With the implementation of the National Spatial Data Infrastructure Strategic Plan, the geospatial data sets known as National Geospatial Data Assets (NDGA) and associated analytical services have become available on the National Geospatial Platform. These additional datasets and services are easily accessible by federal agencies, their partners, and stakeholders. EPA uses the National Geospatial Platform to obtain data and services for internal analytical purposes as well as to publish outward-facing geospatial capabilities to the public.

While the Department of the Interior is the managing partner, EPA is a leader in developing the vision and operational plans for the implementation of the Geospatial Data Act as well as OMB guidance on Coordination of Geographic Information and Related Spatial Data Activities and the National Geospatial Platform which incorporates many national geospatial data and analytical services for federal agencies, their partners, and stakeholders. EPA is expected to contribute to the operation of the National Geospatial Platform in FY 2023. The intent is to reduce base costs by providing an opportunity for EPA and other agencies to share approaches on procurement consolidation and include shared services for hosting geospatial data, services, and applications.

Fiscal Year	Account Code	EPA Contribution (in thousands)
2021	020-99-99-99-3100-24	\$225.0
2022	020-99-99-99-3100-24	\$225.0
2023	020-99-99-99-3100-24	\$225.0

Financial Management Line of Business

The Financial Management Line of Business (FM LoB) is a multi-agency effort whose goals include achieving process improvements and cost savings in the acquisition, development, implementation, and operation of financial management systems. By incorporating the same FM LoB-standard processes as those used by central agency systems, interfaces among financial systems are streamlined, and the quality of information available for decision-making is improved.

Fiscal Year	Account Code	EPA Contribution (in thousands)
2021	020-00-01-01-04-1100-24	\$96.0
2022	020-00-01-01-04-1100-24	\$96.0
2023	020-00-01-01-04-1100-24	\$96.0

Grants.gov

The Grants.gov initiative benefits EPA and its grant programs by providing a single location to publish grant opportunities and application packages, and by providing a single site for the grants community to apply for grants using common forms, processes, and systems. EPA believes that the central site raises the visibility of its grant opportunities to a wider diversity of applicants.

The grants community benefits from savings in postal costs, paper, and envelopes. Applicants save time in searching for agency grant opportunities and in learning the application systems of various agencies. In order to streamline the application process, EPA offers Grants.gov application packages for mandatory state grants (i.e., Continuing Environmental Program Grants).

Fiscal Year	Account Code	EPA Contribution (in thousands)
2021	020-00-04-00-04-0160-24	\$335.0
2022	020-00-04-00-04-0160-24	\$347.0
2023	020-00-04-00-04-0160-24	\$262.0

Budget Formulation and Execution Line of Business

The Budget Formulation and Execution Line of Business (BFELoB) allows EPA and other agencies to access budget-related benefits and services. The Agency has the option to implement LoB-sponsored tools, training, and services.

EPA has benefited from the BFELoB by sharing valuable information on how systems and software being developed by the LoB have enhanced work processes. This effort has created a

government-only capability for electronic collaboration (Wiki) in which the Budget Community website allows EPA to share budget information internally, with OMB, and with other federal agencies. The Agency also made contributions to the Human Capital Workgroup, participating in development of online training modules for budget activities – a valuable resource to all agency budget staff. The LoB has developed the capability to have secure, virtual online meetings where participants can view budget-related presentations from their workspace and participate in the discussion through a conference line. The LoB provides regularly scheduled symposia as an additional forum for EPA budget employees.

Fiscal Year	Account Code	EPA Contribution (in thousands)
2021	020-99-99-99-3200-24	\$120.0
2022	020-99-99-99-3200-24	\$120.0
2023	020-99-99-99-3200-24	\$120.0

Federal Human Resources Line of Business

OPM's Human Resources Line of Business (HR LoB) provides the federal government the infrastructure to support pay-for-performance systems, modernized HR systems, and the core functionality necessary for the strategic management of human capital.

The OPM HR LoB offers common solutions that enable federal departments and agencies to work more effectively, and to provide managers and executives across the federal government an improved means to meet strategic objectives. EPA will benefit by supporting an effective program management activity which evaluates provider performance, customer satisfaction, and compliance with program goals, on an ongoing basis.

Fiscal Year	Account Code	EPA Contribution
		(in thousands)
2021	020-00-01-16-04-1200-24	\$68.0
2022	020-00-01-16-04-1200-24	\$69.0
2023	020-00-01-16-04-1200-24	\$69.0

Hiring Assessment Line of Business

The Hiring Assessment Line of Business (Hiring LoB) supports developing, promoting, testing, and scaling additional processes and technology in support of assessment processes and related hiring improvements, including government-wide hiring actions and shared certificates. In FY 2022, EPA will create a talent team to help implement data-driven assessment strategies to improve selection outcomes, to share new approaches and best practices, and to identify government-wide implementation challenges. Together, talent teams and the Hiring LoB will create a multi-level effort focused on improving hiring outcomes, both within agencies and across government.

Fiscal Year	Account Code	EPA Contribution (in thousands)
2021	020-00-01-16-04-1200-24	\$0.0
2022	020-00-01-16-04-1200-24	\$66.0
2023	020-00-01-16-04-1200-24	\$66.0

Integrated Acquisition Environment

The Integrated Acquisition Environment (IAE) is comprised of a number of government-wide automated applications and/or databases that streamline the acquisition business process across the government and support EPA's contracting and grants programs. In FY 2012, GSA began the process of consolidating the systems into one central repository called the System for Award Management (SAM). Until the consolidation is complete, EPA leverages some IAE systems via electronic linkages to EPA's Acquisition System (EAS); other IAE systems are not linked directly to EAS but benefit the Agency's contracting staff and vendor community as stand-alone resources.

EAS uses SAM vendor data: contracting officers can download vendor-provided representation and certification information electronically via SAM, which allows vendors to submit this information once rather than separately for every contract proposal. Additionally, contracting officers access the Federal Awardee Performance and Integrity Information System, which contains records on contractor performance, including past performance evaluations, and suspensions and debarments.

Through the IAE, contracting officers also can review Wage Determinations to obtain information required under the Service Contract Act and the Davis-Bacon Act. EAS links to the Contract Awards system, expected to be deployed in FY 2021, for submission of contract actions at the time of award. FPDS provides public access to government-wide contract information. The Electronic Subcontracting Reporting System supports vendor subcontracting data submission for contracts identified as requiring this information. EPA publishes notices of proposed contract actions expected to exceed \$25 thousand to the Contact Opportunities listing. Vendors use this publicly available information to identify business opportunities in federal contracting.

The IAE houses Assistance Listings (formerly called Catalog of Federal Domestic Assistance (CFDA), which provides a comprehensive description of all federal assistance including information on eligibility, how to apply, and matching requirements for public consumption.

Further, EPA's IAE fee supports use of services for standardized obligations and award-related information reporting for all Federal financial assistance and procurement awards as required by the Federal Funding Accountability and Transparency Act of 2006 (FFATA) and the DATA Act of 2014.

Fiscal Year	Account Code	EPA Service Fee (in thousands)
2021	020-00-01-16-04-0230-24	\$720.0
2022	020-00-01-16-04-0230-24	\$720.0
2023	020-00-01-16-04-0230-24	\$720.0

Federal PKI Bridge

Federal Public Key Infrastructure (FPKI) provides the government with a common infrastructure to administer digital certificates and public-private key pairs, including the ability to issue, maintain, and revoke public key certificates. FPKI leverages a security technique called Public Key Cryptography to authenticate users and data, protect the integrity of transmitted data, and ensure non-repudiation and confidentiality.

Fiscal Year	Account Code	EPA Contribution (in thousands)
2021	020-99-99-99-0090-24	\$44.0
2022	020-99-99-99-0090-24	\$46.0
2023	020-99-99-99-0090-24	\$46.0

Freedom of Information Act Portal

The Freedom of Information Act (FOIA) Improvement Act of 2016 directed the Office of Management and Budget and Department of Justice to build a consolidated online request portal that allows a member of the public to submit a request for records to any agency from a single website. DOJ is managing the development and maintenance of this National FOIA Portal. EPA and other federal agencies were requested to contribute to this effort.

Fiscal Year	Account Code	EPA Contribution
		(in thousands)
2021	020-99-99-99-0090-24	\$43.0
2022	020-99-99-99-0090-24	\$37.0
2023	020-99-99-99-0090-24	\$36.0

Federal Executive Boards

The Federal Executive Boards (FEBs) will be under a new governance and funding structure to reinvigorate the roles and responsibilities of FEBs to advance the Administration's objectives to strengthen the Federal workforce, as directed by OMB. A new Line of Business (LOB) will fund FEBs, replacing the current model which relies on an ad hoc structure with EPA providing funding for regional FEB staff.

Fiscal Year	Account Code	EPA Contribution (in thousands)
2021	N/A	\$0.0
2022	N/A	\$0.0
2023	020-99-99-99-1300-24	\$300.0

FY 2023 Administrator's Priorities

Funding for the Administrator's priorities are allocated by program project in the FY 2023 President's Budget with a total of \$2.375 million in the Environmental and Programs Management Account and \$125 thousand in the Science and Technology Account.

These funds, which are set aside for the Administrator's priorities, are used to address unforeseen issues that may arise during the year. These funds are used by the Administrator to support critical unplanned issues and the amounts shown in the below table will be reallocated, as needed, in accordance with reprogramming limits.

FY 2023 President's Budget Funding for Administrator's Priorities

Appropriation	Program Project	Dollars in Thousands
EPM	Acquisition Management	\$150
EPM	Brownfields	\$25
EPM	Civil Enforcement	\$150
EPM	Civil Rights / Title VI Compliance	\$75
EPM	Compliance Monitoring	\$100
EPM	Criminal Enforcement	\$145
EPM	Drinking Water Programs	\$100
EPM	Exchange Network	\$75
EPM	Federal Stationary Source Regulations	\$100
EPM	Federal Support for Air Quality Management	\$130
EPM	Human Resources Management	\$25
EPM	International Sources of Pollution	\$50
EPM	IT / Data Management	\$175
EPM	Legal Advice: Environmental Program	\$100
EPM	Legal Advice: Support Program	\$75
EPM	NEPA Implementation	\$100
EPM	Pesticides: Protect Human Health from Pesticide Risk	\$150
EPM	Pesticides: Protect the Environment from Pesticide Risk	\$150
EPM	Pesticides: Realize the Value of Pesticide Availability	\$100
EPM	RCRA: Waste Management	\$25
EPM	Science Advisory Board	\$100
EPM	State and Local Prevention and Preparedness	\$100
EPM	Surface Water Protection	\$50
EPM	TRI / Right to Know	\$75
EPM	Tribal - Capacity Building	\$50
S&T	Federal Support for Air Quality Management	\$25
S&T	Research: Air, Climate and Energy	\$50
S&T	Research: Chemical Safety and Sustainability	\$50
Total		\$2,500

FY 2023: Consolidations, Realignments, or Other Transfer of Resources

Environmental Justice and External Civil Rights Compliance as a National Program Manager

The FY 2022 President's Budget signaled the Administration's and EPA's intent to establish a new National Program Manager (NPM) for Environmental Justice (EJ). EPA intends to bring together the Office of Environmental Justice (OEJ) and the External Civil Rights Compliance Office (ECRCO) through their reorganization into an NPM for EJ and External Civil Rights Compliance.

Currently, OEJ is located within the Office of Policy within the Office of the Administrator, and ECRCO is located within the Office of General Counsel. The proposed reorganization would elevate EJ and external civil rights compliance to the national program level to bolster the integration of EJ considerations and civil rights compliance across all EPA policies, programs, and activities; support the efforts of regulatory partners to similarly integrate EJ and fully comply with civil rights requirements; and enhance EPA's ability to meaningfully engage with and directly support communities with EJ and civil rights concerns. This change would reflect and help to bolster EPA efforts to fully achieve the many commitments in the FY 2022-2026 EPA Strategic Plan, Goal 2, Take Decisive Action to Advance Environmental Justice and Civil Rights, which similarly elevates EJ and external civil rights compliance priorities.

The head of the new NPM would be an Assistant Administrator to be nominated by the President and confirmed by the Senate. Further information and details on the proposed reorganization are under development. EPA will continue to work closely with the Office of Management and Budget and Congress on the proposal.

Office of Mission Support

The Office of Mission Support (OMS) is considering a reorganization to realign functions and staff within OMS to better position the office to meet critical mission needs from new requirements associated with President Biden's Executive Orders on climate, ¹² supporting underserved communities, and acquisition. ¹³ The reorganization also would realign functions to balance workload across OMS, eliminate organizational layers, and consolidate similar or duplicative functions to better leverage personnel and resources. This proposed reorganization would not affect any other EPA program office or regional office.

¹² For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

¹³ For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.

FY 2023 STAG Categorical Program Grants Statutory Authority and Eligible Uses (Dollars in Thousands)

			Donars in Thousands)			
Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2021 Actual Dollars (X1000)	FY 2022 Annualized Continuing Resolution Dollars (X1000)	FY 2023 President's Budget Dollars (X1000)
State and Local Air Quality Management	CAA, Section 103.	Air pollution control agencies as defined in Section 302(b) of the CAA	S/L monitoring and data collection activities in support of the PM _{2.5} monitoring network and associated program costs.	\$42,229.8	\$41,905.0	\$58,660.0
State and Local Air Quality Management	CAA, Section 103.	Air pollution control agencies as defined in Section 302(b) of the CAA	S/L monitoring and data collection activities in support of air toxics monitoring.	\$7,953.6	\$7,488.0	\$20,000.0
State and Local Air Quality Management	CAA, Section 103.	Air pollution control agencies as defined in Section 302(b) of the CAA	S/L monitoring procurement activities in support of the NAAQS.	\$5,042.9	\$4,198.0	\$7,000.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2021 Actual Dollars (X1000)	FY 2022 Annualized Continuing Resolution Dollars (X1000)	FY 2023 President's Budget Dollars (X1000)
State and Local Air Quality Management	CAA, Sections 103, 105, 106.	Air pollution control agencies as defined in Section 302(b) of the CAA; Multijurisdictional organizations (non-profit organizations whose boards of directors or membership is made up of CAA Section 302(b) agency officers and whose mission is to support the continuing environmental programs of the States); Interstate air quality control region designated pursuant to section 107 of the CAA or of implementing Section 176A, or Section 184 NOTE: only the Ozone Transport Commission is eligible.	Carrying out the traditional prevention and control programs required by the CAA and associated program support costs, including all monitoring activities, including PM2.5 monitoring and associated program costs (Section 103 and/or 105); Coordinating or facilitating a multi-jurisdictional approach to carrying out the traditional prevention and control programs required by the CAA (Sections 103 and 106); Supporting training for CAA Section 302(b) air pollution control agency staff (Sections 103 and 105); Supporting research, investigative, and demonstration projects (Section 103).	\$185,320.9 Section 105 grants	\$175,270.0 Section 105 grants	\$235,838.0 Section 105 grants
				Total: \$241,186.2	Total: \$229,500.0	Total: \$322,198.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2021 Actual Dollars (X1000)	FY 2022 Annualized Continuing Resolution Dollars (X1000)	FY 2023 President's Budget Dollars (X1000)
Tribal Air Quality Management	CAA, Sections 103 and 105; Tribal Cooperative Agreements (TCA) in annual Appropriations Acts.	Tribes; Intertribal Consortia; State/Tribal College or University	Conducting air quality assessment activities to determine a Tribe's need to develop a CAA program; Carrying out the traditional prevention and control programs required by the CAA and associated program costs; Supporting CAA training for Federally- recognized Tribes.	\$8,963.5 Section 103 grants	\$9,415.0 Section 103 grants	\$18,126.0 Section 103 grants
Radon	TSCA, Sections 10 and 306.	State Agencies, Tribes, Intertribal Consortia	Assist in the development and implementation of programs for the assessment and mitigation of radon.	\$8,684.5	\$7,795.0	\$12,487.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2021 Actual Dollars (X1000)	FY 2022 Annualized Continuing Resolution Dollars (X1000)	FY 2023 President's Budget Dollars (X1000)
Multipurpose Grants	Annual Appropriations Acts; all other major environmental legislation including, but not limited to, CAA, CWA, SDWA, and CERCLA	State Agencies, Tribes	Implementation of mandatory statutory duties delegated by EPA under pertinent environmental laws.	\$14,297.2	\$10,000.0	\$10,200.0
Water Pollution Control (Section 106)	FWPCA, as amended, Section 106; TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia, Interstate Agencies	Develop and carry out surface and ground water pollution control programs, including NPDES permits, TMDLs, WQ standards, monitoring, and NPS control activities.	\$227,741.2	\$230,000.0	\$251,538.0
Nonpoint Source (NPS – Section 319)	FWPCA, as amended, Section 319(h); TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	Implement EPA-approved State and Tribal nonpoint source management programs and fund projects as selected by the state.	\$180,138.7	\$177,000.0	\$188,999.0
Wetlands Program Development	FWPCA, as amended, Section 104 (b)(3); TCA in annual Appropriations Acts.	States, Local Governments, Tribes, Interstate Organizations, Intertribal Consortia, Non-Profit Organizations	To develop new wetland programs or enhance existing programs for the protection, management, and restoration of wetland resources.	\$10,110.8	\$14,192.0	\$15,079.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2021 Actual Dollars (X1000)	FY 2022 Annualized Continuing Resolution Dollars (X1000)	FY 2023 President's Budget Dollars (X1000)
Public Water System Supervision (PWSS)	SDWA, Section 1443(a); TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	Assistance to implement and enforce National Primary Drinking Water Regulations to ensure the safety of the Nation's drinking water resources and to protect public health.	\$110,341.3	\$112,000.0	\$132,566.0
Underground Injection Control (UIC)	SDWA, Section 1443(b); TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	Implement and enforce regulations that protect underground sources of drinking water by controlling Class I-V underground injection wells.	\$10,604.0	\$11,164.0	\$11,387.0
Beaches Protection	BEACH Act of 2000; TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia, Local Governments	Develop and implement programs for monitoring and notification of conditions for coastal recreation waters adjacent to beaches or similar points of access that are used by the public.	\$10,862.8	\$9,619.0	\$9,811.0
Resource Recovery and Hazardous Waste Grants	Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act § 3011; Consolidated Appropriations Act, 2018 (Public Law 115-141); Save our Seas (SOS) 2.0, 2020, Pub. L. 116-224.	States, Tribes, Intertribal Consortia	Develop and implement solid and hazardous waste and circular economy programs.	\$110,759.6	\$101,500.0	\$108,247.0 \$10,000.0 Post-consumer materials management or recycling facilities Total: \$118,247.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2021 Actual Dollars (X1000)	FY 2022 Annualized Continuing Resolution Dollars (X1000)	FY 2023 President's Budget Dollars (X1000)
Brownfields	Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA§ 128(a)).	States, Tribes, Intertribal Consortia	Establish and enhance state and tribal response programs which will survey and inventory brownfields sites; develop oversight and enforcement authorities to ensure response actions are protective of human health and the environment; develop ways for communities to provide meaningful opportunities for public participation; and develop mechanisms for approval of a cleanup plan and verification and certification that cleanup is complete.	\$46,752.4	\$46,195.0	\$46,954.0
Underground Storage Tanks (UST)	Solid Waste Disposal Act of 1976, as amended by the Superfund Amendments and Reauthorization Act of 1986, § 2007(f); Energy Policy Act, § 9011.	States	Provide funding for States' underground storage tanks and to support direct UST implementation programs.	\$1,475.0	\$1,475.0	\$1,505.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2021 Actual Dollars (X1000)	FY 2022 Annualized Continuing Resolution Dollars (X1000)	FY 2023 President's Budget Dollars (X1000)
Pesticides Program Implementation	FIFRA, Sections 23(a)(1); Federal Food, Drug, and Cosmetic Act (FFDCA); Food Quality Protection Act (FQPA); Endangered Species Act (ESA).	States, Tribes, Intertribal Consortia	Implement the following programs through grants to States, Tribes, partners, and supporters for implementation of pesticide programs, including: Certification and Training (C&T); Worker Protection; Endangered Species Protection Program (ESPP) Field Activities; Pesticides in Water; and Tribal Programs.	\$11,862.9 - States formula \$285.0 HQ Programs: - Tribal - PREP - School IPM Total: \$12,147.9	\$11,051.0 - States formula	\$12,759.0 - States formula

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2021 Actual Dollars (X1000)	FY 2022 Annualized Continuing Resolution Dollars (X1000)	FY 2023 President's Budget Dollars (X1000)
Lead	TSCA, Sections 401-412.	States, Tribes, Intertribal Consortia	Aid states, territories, the District of Columbia, and tribes to develop and implement authorized lead-based paint abatement programs and authorized Renovation, Repair, and Painting (RRP) programs. EPA directly implements these programs in all areas of the country that are not authorized to do so, and will continue to operate the Federal Lead-based Paint Program Database (FLPP) of trained and certified lead- based paint professionals.	\$13,864.3 404(g) State/ Tribal Certification	\$12,328.0 404(g) State/ Tribal Certification	\$22,653.0 404(g) State/ Tribal Certification
				\$2,030.9 404(g) Direct Implementation	\$1,947.0 404(g) Direct Implementation	\$1,986.0 404(g) Direct Implementation
				Total: \$15,895.2	Total: \$14,275.0	Total: \$24,639.0
Toxic Substances Compliance	Toxic Substances Control Act (TSCA) § 28(a) and 404(g); TCA in annual Appropriations Acts.	States, Federally Recognized Indian Tribes, Intertribal Consortia, and Territories of the U.S.	Assist in developing, maintaining, and implementing compliance monitoring programs for PCBs, asbestos, and Lead Based Paint. In addition, enforcement actions by 1) the Lead Based Paint program and 2) States that obtained a "waiver" under the Asbestos program.	\$6,150.8	\$4,760.0	\$6,877.0
Pesticide Enforcement	FIFRA § 23(a)(1); TCA in annual Appropriations Acts.	States, Federally Recognized Indian Tribes, Intertribal Consortia, and Territories of the U.S.	Assist with implementation of cooperative pesticide enforcement programs.	\$24,321.1	\$24,000.0	\$25,580.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2021 Actual Dollars (X1000)	FY 2022 Annualized Continuing Resolution Dollars (X1000)	FY 2023 President's Budget Dollars (X1000)
Pollution Prevention	Pollution Prevention Act of 1990, Section 6605; TSCA Section 10; FY 2000 Appropriations Act (P.L. 106-74); TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	Provides assistance to States and State entities (<i>i.e.</i> , colleges and universities) and Federally-recognized Tribes and intertribal consortia to deliver pollution prevention technical assistance to small and medium-sized businesses. A goal of the program is to assist businesses and industries with identifying improved environmental strategies and solutions for reducing waste at the source.	\$5,022.1	\$4,630.0	\$5,775.0
Tribal General Assistance Program	Indian Environmental General Assistance Program Act (42 U.S.C. § 4368(b); TCA in annual Appropriations Acts.	Tribal Governments, Intertribal Consortia	Plan and develop Tribal environmental protection programs.	\$69,307.6	\$66,250.0	\$85,009.0
National Environmental Information Exchange Network (NEIEN, aka "the Exchange Network")	Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).	States, U.S. Territories, Federally Recognized Tribes and Native Villages, Interstate Agencies, Tribal Consortia, Other Agencies with Related Environmental Information Activities.	Helps States, U.S. Territories, Tribes, and intertribal consortia develop the information management and technology (IM/IT) capabilities they need to participate in the Exchange Network, to continue and expand data-sharing programs, and to improve access to environmental information.	\$9,865.5	\$9,336.0	\$15,000.0

Agency Response To Office Of Inspector General FY 2022 Key Management Challenges Report, Issued November 12, 2021

Below is the Agency's response to the OIG's FY 2022 Key Management Challenges report, which included issues related to the Environmental Protection Agency's mission to protect human health and the environment. EPA agrees there are significant environmental and human health challenges currently, including but not limited to tackling the climate crisis, taking decisive action to advance environmental justice and civil rights, ensuring safety of chemicals, and ensuring scientific integrity and science-based decision making. These and other priorities are communicated in the *FY 2022-2026 EPA Strategic Plan*, along with a detailed roadmap for achieving our mission. The Agency has set a number of long-term performance goals in the *Strategic Plan* and annual performance goals in the FY 2023 President's Budget that focus on areas related to key management challenges. Please refer the FY 2023 Annual Performance Plan table in President's Budget for those measures.

The Agency has taken actions in response to the detailed considerations raised in the IG audits and is working to complete others. In addition, as mentioned in the management challenge descriptions, EPA has requested appropriations in the FY 2023 President's Budget to assist in expanding work in a number of these areas and other key priorities. The responses provide a summary of the major topics. Further details are available in the referenced audit narratives and Agency responses.

1. Mitigating the Causes and Adapting to the Impacts of Climate Change

Summary of Challenge: The OIG believes that the EPA must take a leadership role in limiting climate change and mitigating its effect on human health and the environment.

Agency Response: EPA is working to drive Greenhouse Gas emission reductions through an integrated approach of regulations, partnerships, and technical assistance. EPA also is working to strengthen the nation's adaptive capacity and resilience, with a particular focus on advancing environmental justice. EPA will ensure its programs, policies, regulations, enforcement activities, and operations consider current and future impacts of climate change and how those impacts disproportionately affect certain communities. As directed in Executive Order (E.O.) 14008, Tackling the Climate Crisis at Home and Abroad, EPA issued a Policy Statement on Climate Change Adaptation in May 2021 and published its 2021 Climate Adaptation Action Plan in October 2021. In FY 2022, the agency will publish program and regional office Implementation Plans, which will report progress to date and identify actions needed to address the agency-wide priorities identified in the Climate Adaptation Action Plan. Program and regional offices will engage with states, tribes, territories, and local communities in developing their plans. As noted in the Climate Adaptation Action Plan, the agency will need additional personnel and funding resources to successfully implement many of the priority actions in the plan. This resource requirement was included in the plan per instructions from CEQ and OMB.

Additional agency efforts include:

 Office of Water established a management-level Water Climate Committee to develop the National Water Program's Climate Adaptation plan. The office will oversee implementation and track progress, consider climate actions across the office, and work with co-regulators and partners to implement priority adaptation actions that also may have co-benefits of climate mitigation.

Responsible Agency Official: Victoria Arroyo, EPA Senior Climate Adaptation Official; Betsy Shaw, Deputy Assistant Administrator, Office of Air and Radiation

2. Integrating and Leading Environmental Justice Across the Agency and Government

Summary of Challenge: According to the OIG, as part of its effort to integrate environmental justice across its programs, the EPA must address the environmental hazards and cumulative risk facing at-risk communities and effectively communicate that risk to those communities.

Agency Response: The agency continues to address issues and concerns raised by EPA's OIG regarding its integration of environmental justice and civil rights within EPA. This includes leadership from the Office of Policy (OP) and Office of Environmental Justice (OEJ) senior representatives on EPA initiatives to implement President Biden's E.O. 13985 on Racial Equality and E.O. 14008 on Tackling the Climate Crisis at Home and Abroad, and participation on inter-agency and intra-agency working groups. On April 7, 2021, EPA Administrator Michael Regan issued an agency-wide memorandum, Our Commitment to Environmental Justice, which clearly communicated his priority of centering EJ and civil rights compliance throughout all EPA's activities. Administrator Regan's memorandum contained specific instructions for EJ integration within programmatic activities, full enforcement of our environmental and civil rights laws, emphasis on meaningful engagement and consultation, and reinforcing our leadership in implementing President Biden's executive direction. Efforts to address EPA-specific recommendations made in the October 2019 GAO report, Environmental Justice: Federal Efforts Need Better Planning, Coordination, and Methods to Assess Programs (GAO-19-543), are now largely guided through implementation of E.O. 14008 and E.O. 13985 by the White House Council on Environmental Quality (CEQ).

EPA is supporting and engaging the CEQ on providing government-wide leadership on those recommendations. Also, EPA included Take Decisive Action to Advance Environmental Justice and Civil Rights as a central goal of the FY 2022-2026 EPA Strategic Plan. In the Strategic Plan, Goal 2 makes several important commitments to furthering agency efforts. This includes advancing the integration of EJ considerations across all EPA policies, programs, and activities. Similarly, it includes advancing agency efforts to ensure compliance with civil rights obligations within EPA's activities as well as the activities of recipients of EPA funding. Administrator Regan made an important decision to place EPA's EJ and civil rights compliance efforts side by side in recognition of their inextricable link and mutually supportive goals. This includes the intent to bring together OEJ and the External Civil Rights Compliance Office (ECRCO) in the new national program as signaled in the FY 2022 President's Budget. EPA has committed to strengthening Title VI enforcement and fully utilizing its civil rights implementation and enforcement authority. EPA will issue clear civil rights policy guidance to increase recipient's compliance with civil rights laws. Specific draft commitments in Goal 2 advance the incorporation of EJ and civil rights compliance in fundamental elements of EPA's mission achievement such as:

- Formal agreements with states and tribal governments.
- Significant EPA actions with EJ and civil rights implications.
- Resources provided to communities to increase their capacity to meaningfully engage with EPA programs.
- Affirmative post-award compliance reviews targeting critical environmental, health and quality of life impacts that adversely affect overburdened communities.
- EPA program compliance with language and disability access requirements.
- Direct implementation of EPA authorities in Indian country.
- Transparent commitments to measure outcomes on the ground that are significant to communities with EJ concerns, amongst other commitments.

It is important to note that EPA has tied together many key objectives and efforts to implement E.O. 13985 and E.O. 14008 through specific commitments in Goal 2 of the *FY 2022 –2026 EPA Strategic Plan* to help reinforce and drive achievement of the equity and justice aims of those orders.

Additionally, enforcement remains a top priority in the agency's work to implement EJ goals. The Office of Enforcement and Compliance Assurance (OECA) has issued four directives to enhance work in communities with EJ challenges across all enforcement programs:

- Strengthening Enforcement in Communities with Environmental Justice Concerns (April 30, 2021).
- Strengthening Environmental Justice Through Criminal Enforcement (June 21, 2021).
- Strengthening Environmental Justice Through Cleanup Enforcement Actions (July 1, 2021).
- Using All Appropriate Injunctive Relief Tools in Civil Enforcement Settlements (April 26, 2021).

Moreover, acknowledging the ongoing role of the Section 319 program in benefitting communities via watershed projects and other actions, EPA issued a memo in September 2021 that strongly encourages actions in FY 2022 to assess and advance delivery of Non-Point Source (NPS) benefits to disadvantaged communities. The September 2021 memo commits EPA to take several actions in support of the goal to assess and advance delivery of NPS benefits to disadvantaged communities, recognizing that this will be a shared learning experience. This memo also commits to an ongoing dialogue with the NPS community as this work goes forward.

Responsible Agency Official: Mathew Tejada, Director, Office of Environmental Justice; Elise Packard, Deputy General Counsel for Operations, Office of General Counsel

3. Ensuring the Safe Use of Chemicals

Summary of Challenge: The OIG believes that the EPA must develop timely and accurate chemical risk assessments to identify acceptable exposure levels for humans and the environment.

Agency Response: This management challenge discusses implementation of chemical safety standards under the pesticides program and the TSCA program. EPA has made significant

advancements to these programs. To improve the timeliness of endocrine disruptor risk assessments, a new organizational structure was implemented to ensure management accountability for the Endocrine Disruptor Screening Program (EDSP) to better align with pesticide regulatory activities and establish a procedure for communication and coordination with relevant program offices with testing responsibilities. In compliance with Pesticide Registration data requirements in ecological risk assessments, the agency developed a table matrix for inclusion in new active ingredient environmental risk assessments that clearly indicates how data requirements are addressed in support of new active ingredient registration decisions, (completed in January 2022). In addition, the New Approach Methods (NAMs) refer to any technology, methodology, approach, or combination that can provide information on chemical hazard and risk assessment to avoid the use of animal testing. The white paper and establishment of EDSP Policy Council, referenced above, are initial steps towards developing a structure and process for making determinations on required testing.

To address concerns related to TSCA risk evaluation capacity needs, EPA has developed and revised cost estimates for the development of risk evaluations, and developed phased planning based on cost estimates. EPA also has identified and implemented best practices to maximize effectiveness and engaged in internal planning efforts to determine the best distribution of resources to meet required activities.

This management challenge also focuses on toxicity assessments, specifically EPA's IRIS Program. EPA's IRIS Program made significant advances to the approaches used to characterize the health hazards of chemicals found in the environment related to productivity and timeliness. Additionally, EPA made advances in the practice of conducting hazard identification, dose-response analysis, pharmacokinetic modeling, and the incorporation of modern IT databases and artificial intelligence and machine learning tools to expedite the review and evaluation of contaminants of concern. These advancements are documented in the ORD Staff Handbook for Developing IRIS Assessments, released for external peer review by the National Academy of Sciences (NAS) in FY 2021 and are illustrated in the more than 20 assessment products released to the public by the IRIS Program since 2016. In a prior NAS workshop report, Progress Toward Transforming the Integrated Risk Information System *Program: A 2018 Evaluation*, EPA's IRIS Program was praised for changes made during the past several years, as well as for the successful trajectory of the Program. To address the priorities for assessing chemicals in the IRIS Program and maintaining a current IRIS database, the agency implemented a formal nomination process that ensures the IRIS Program prioritizes assessments of the highest priority identified by EPA program and regional offices, given limited resources. EPA documented the results of the FY 2021 nomination process via the June 2021 IRIS Program Outlook.

Responsible Agency Official: Tim Watkins, Acting Director, Center for Public Health & Environmental Assessment, Office of Research and Development; Samantha Jones, Associate Director, Center for Public Health & Environmental Assessment, Office of Research and Development; Dr. Wayne Cascio, Acting Principal Deputy Assistant Administrator for Science, Office of Research and Development; Rick Keigwin, Deputy Assistant Administrator, Office of Chemical Safety and Pollution Prevention

4. Safeguarding Scientific Integrity Principles

Summary of Challenge: According to the OIG, science-based decisions at the EPA must be based on principles of scientific integrity to ensure that human health and the environment are protected by using the best-available science.

Agency Response: As outlined in Administrator Regan's 2021 Mass Mailer to the agency, "scientific integrity is a core value at EPA" and under his leadership EPA is working "to ensure our science is of the highest quality and use it to inform our decision making." In the FY 2022-2026 EPA Strategic Plan, the Cross-Agency Strategy Ensure Scientific Integrity and Science-Based Decision Making will be implemented to "strengthen the policies and procedures surrounding scientific integrity and the use of science and evidence to inform Agency decision making." EPA's Scientific Integrity Policy (SIP) has been in effect since February 2012 and is one of the strongest scientific integrity policies in the federal government. The program will be further strengthened by updating the SIP to meet the Office of Science and Technology Policy's (OSTP) requirements and through the creation of implementation plans. EPA will advance a culture of scientific integrity that inspires public trust in the Agency and ensures that EPA achieves its mission of protecting human health and the environment. Additionally, the agency is on target to develop and implement procedures to address allegations of compromised scientific integrity, including violations involving high-profile issues or senior officials. Our efforts to enhance the Agency's culture of scientific integrity are supported by agencywide training and outreach activities that engage employees on scientific integrity. The agency has plans in place to ensure scientific integrity's high visibility through increased training and regular outreach.

Responsible Agency Official: Dr. Francesca Grifo, EPA Scientific Integrity Official, Office of Research and Development; Wayne Cascio, Acting Principal Deputy Assistant Administrator for Science, Office of Research and Development

5. Ensuring Information Technology and Systems Are Protected Against Cyberthreats

Summary of Challenge: The OIG believes that Information technology is a fundamental and essential resource for the EPA to carry out its mission.

Agency Response: Combating cyber threats is a continuing challenge for all federal agencies as evidenced by the recent release of the E.O. 14028, Improving the Nation's Cybersecurity. EPA understands the prevalence and complexity of ever-growing cybersecurity threats and is aware of the potential impacts to its mission if information assets are compromised. The agency appreciates the Office of the Inspector General's (OIG) perspective on the management challenge regarding enhancing information technology (IT) security to combat cyber threats and employed concerted efforts to address the findings and recommendations identified in audit reports highlighted in this management challenge including, but not limited to the following:

- Developed and implemented processes within the Office of Mission Support operations to improve management and oversight of audits and corrective actions. (Ref: N/A)
- Developed agencywide Cybersecurity metrics that are tracked monthly and discussed in senior leader Monthly Business Reviews. (Ref: 19-P-0158)
- Implemented actions to ensure contractor operated managed systems are in

compliance with federal Cybersecurity requirements via system assessments, corrective action monitoring and the development of training for contract officers and contract officer representatives on their responsibilities for identifying contracts that require Environmental Protection Agency Acquisition Guide (EPAAG) Section 39.1.2 tasks. (Ref:17-P-0344)

- Documented CIO's role in information security through policy and procedures. (Ref: SP 800-30)
- Documented and implemented controls to validate plans of action and milestones for vulnerability testing results. (Ref: 20-P-0120/19-208)
- Established a process to periodically review security settings for the agency's governance, risk management and compliance (GRC) tracking system to validate whether they meet standards and implemented audit logging capabilities to capture data changes and a log review process. (Ref: 19-P-0158)

Building upon the progress outlined above, EPA has made significant strides in strengthening its Cybersecurity program. As evidenced in it's overall "Managing Risk" FISMA report rating, EPA has achieved or exceeded many of the Federal Cybersecurity Framework metrics via the implementation of automated Enterprise IT solutions and continuous monitoring strategies, including but not limited to:

- Deployed more than 18,000 agents on employee workstations to enable the DHS Continuous Diagnostics and Mitigation (CDM) Software Asset Management capability.
- Deployed Privilege Access User Management tools to protect Systems Administrator accounts resulting in the removal of numerous old privilege user accounts and the vaulting and securing of approximately 800 privilege user accounts.
- Implemented Endpoint Detection and Response (EDR) Tools to protect against malware and advanced threats by automatically detecting, alerting, and providing threat insights and remediation recommendations on EPA endpoints.
- Enhanced incident response capabilities by deploying a scalable Next Generation Security Incident and Event Management (SIEM) System.

Among a number of additional priorities, EPA is working on the E.O. 14028 tasks such as:

- Implementing Multifactor Authentication and Encryption, Zero Trust Architecture, and integration with cloud security technologies.
- Updating its Cybersecurity policies and procedures, streamlining, and strengthening its security training program for users with significant responsibilities.
- Deploying Enterprise IT security tools and solutions to protect the IT operating environment.

With respect to the agency's water systems cybersecurity program, which also is discussed as part of this management challenge, EPA is implementing a set of actions to improve security at facilities nationwide. Agency efforts include:

- EPA will continue working with each state, territory, and tribe to develop and train a cadre of technical assistance providers who can work directly with individual water systems to assess and enhance their cybersecurity practices.
- EPA is pursuing regulatory and statutory options in the near-term for addressing cybersecurity in the water sector.
- In Q4 FY 2022 or early Q1 FY 2023 EPA intends to publish guidance for public water systems and states elucidating the cybersecurity practices that can deter cyberattacks.

Afterwards, the agency plans to develop a nationwide training effort for all states and all public water systems on assessing and implementing effective cybersecurity practices.

- EPA intends to work in close coordination with DHS in the development of the sectorspecific critical infrastructure cybersecurity performance goals, aligning them with the cybersecurity guidance for water systems and states.

Responsible Agency Official: Tonya Manning, Acting Director, Office of Information Security & Privacy, Office of Mission Support; Benita Best-Wong, Deputy Assistant Administrator, Office of Water

6. Managing Infrastructure Funding and Business Operations

Summary of Challenge: The EPA must effectively oversee the funding and operation of America's water, wastewater, and other environmental infrastructure.

Agency Response: The OIG identified managing infrastructure funding and business operations as a top management challenge for the agency. To provide effective oversight for programs potentially receiving infrastructure funding, the agency is engaged in an intensive review and planning effort for programs that are slated for support. Led by the Senior Advisor to the Deputy Administrator assigned to the infrastructure implementation, plans include strategic and tactical steps for rapid and well-coordinated implementation. Operating models identify critical program components and objectives, establish an implementation structure, and engage stakeholders. A separate set of training, technical assistance, and internal control plans are being developed by the mission support offices to ensure that funds directed toward infrastructure improvements through the use of grants, loans, and contracts are utilized as intended. EPA acknowledges that the increase in funding will require appropriate oversight and is committed to safeguarding its resources against waste, fraud, abuse, and mismanagement. Additional agency efforts include:

- Working across the agency on a 30, 60, 90-day implementation plan for the Bipartisan Infrastructure Bill, including an assessment of staffing, administrative, and internal control needs.
- Holding numerous strategic planning sessions between senior leadership and EPA program offices with infrastructure implementation responsibilities to effectively plan for the influx of infrastructure resources.
- Holding meetings to discuss utilizing the most effective acquisition and grant approaches to achieve environmental results and identifying the appropriate human resources needs and hiring strategies to support a diverse and inclusive workforce.
- Conducting annual reviews of state programs for Clean Water and Drinking Water State Revolving Funds (SRF) through an array of activities. This includes providing regional and state SRF support and training, performing analyses, and reporting information in support of fiduciary and programmatic oversight.
- Monitoring all executed loans in its WIFIA portfolio to assess changes in credit risk, monitor project construction, and verify that borrowers are abiding by the credit agreement laws and regulation through final loan repayment (approximately 40 years).
- Establishing an internal working group to focus on the planning and oversight of the infrastructure implementation.

Responsible Agency Official: Zealan Hoover, Senior Advisor to the Deputy Administrator; Lynnann Hitchens, Acting Principal Deputy Assistant Administrator, Office of Mission Support; Faisal Amin, Chief Financial Officer, Office of the Chief Financial Officer

7. Enforcing Environmental Laws and Regulations

Summary of Challenge: Through enforcement, the EPA ensures that regulated entities are following environmental laws and will continue to do so, as enforcement actions effectively deter future noncompliance.

Agency Response: EPA recognizes enforcement as a critical part of the agency's mission and maintains a strong enforcement program. Under the current Administration, EPA has increased its focus on traditional civil and criminal enforcement tools, with particular attention on environmental and public health threats to overburdened communities. This includes identifying strategies and actions to make environmental justice considerations a part of all aspects of the agency's enforcement program. In furtherance of the Administration's priorities, the agency has rescinded several policies that, in part, were responsible for a number of the concerns identified by the OIG. The agency put in place new policies that reflect the current Administration's emphasis on strong enforcement. With respect to the OIG's discussion of its recent reports (Report Number: 21-P-0132 - Resource Constraints, Leadership Decisions, and Workforce Culture Led to a Decline in Federal Enforcement and Report Number: 21-P-0131- Staffing Constraints, Safety and Health Concerns at EPA's National Enforcement Investigations Center May Compromise Ability to Achieve Mission), the agency remains actively engaged with the OIG in developing corrective actions that will respond to concerns raised in the reports. EPA's OECA looks forward to working with colleagues across the agency, as well as state and tribal partners, stakeholders, and the OIG in addressing issues presented in the FY 2022 Key Management Challenges Report.

Responsible Agency Official: Mark Badalamente, Director, Office of Administration and Policy

Office of Enforcement Compliance Assurance (OECA) Travel by Program Project FY 2017 - FY 2023

Dollars in Thousands

		FY	2017	FY 2	2018	FY	2019	FY	2020	FY	2021	FY 2022	FY 2023
Appr.	Program Project	Enacted	Actuals*	Enacted	Actuals*	Enacted	Actuals*	Enacted	Actuals*	Enacted	Actuals*	ACR	PresBud**
EPM													
	43 - Brownfields	\$16.0	\$3.6	\$16.0	\$10.4	\$16.0	\$4.2	\$16.0	\$18.2	\$3.0	\$0.0	\$16.0	\$3.0
	44 - Civil Enforcement	\$2,148.0	\$1,882.4	\$2,148.0	\$1,860.9	\$2,216.0	\$1,942.2	\$2,197.0	\$886.2	\$742.0	\$602.4	\$2,197.0	\$889.0
1 1	50 - Compliance Monitoring	\$1,524.0	\$1,338.5	\$1,524.0	\$1,498.3	\$1,529.0	\$1,397.2	\$1,516.0	\$694.8	\$567.0	\$301.0	\$1,516.0	\$577.0
	52 - Criminal Enforcement	\$1,522.0	\$1,337.3	\$1,522.0	\$1,385.7	\$1,522.0	. ,		\$748.4	\$548.0	\$462.9	\$1,522.0	\$854.0
	57 - Environmental Justice	\$186.0	\$209.3	\$186.0	\$103.7	\$0.0	\$5.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
	63 - Geographic Program: Chesapeake Bay	\$20.0	\$15.9	\$20.0	\$17.0	\$20.0	\$24.0	\$20.0	\$6.9	\$20.0	\$8.9	\$20.0	
	90 - NEPA Implementation	\$505.0	\$251.6	\$505.0	\$251.1	\$0.0	\$70.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
	F2 - Facilities Infrastructure and Operations	\$238.0	\$643.7	\$238.0	\$503.4	\$238.0	\$234.5	\$238.0	\$204.4	\$84.0	\$131.7	\$238.0	\$84.0
Total		\$6,159.0	\$5,682.3	\$6,159.0	\$5,630.5	\$5,541.0	\$5,136.0	\$5,509.0	\$2,558.9	\$1,964.0	\$1,506.90	\$5,509.0	\$2,427.0
S&T													
	62 - Forensics Support	\$260.0	\$144.8	\$260.0	\$157.8	\$260.0	\$193.1	\$260.0	\$115.0	\$141.0	\$88.3	\$260.0	\$147.0
LUST													
	44 - Civil Enforcement	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
OIL													
	44 - Civil Enforcement	\$14.0	\$9.4	\$14.0	\$16.4	\$14.0	\$8.1	\$14.0	\$3.1	\$14.0	\$6.6	\$14.0	\$14.0
	50 - Compliance Monitoring	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total		\$14.0	\$9.4	\$14.0	\$16.4	\$14.0	\$8.1	\$14.0	\$3.1	\$14.0	\$6.6	\$14.0	\$14.0
SUPER		* 0.0	* • • •	* 0.0	* • • •	* 0.0	**	40.0	**	**		40.0	
1 1	50 - Compliance Monitoring	\$8.0	\$0.0	\$8.0	\$0.0	\$8.0			\$0.0	\$0.0	\$0.0	\$0.0	
1 1	52 - Criminal Enforcement	\$468.0	\$216.8	\$468.0	\$237.4	\$468.0	\$236.7	\$468.0	\$125.8	\$468.0	\$398.7	\$468.0	
	62 - Forensics Support	\$50.0	\$36.4	\$50.0	\$25.5	\$50.0	\$32.9	\$50.0	\$17.2	\$50.0	\$47.5	\$50.0	7
	C7 - Superfund: Enforcement	\$1,135.0	\$904.9	\$1,135.0	\$798.7	\$1,145.0	\$995.7		\$445.0	\$1,143.0	\$154.8	\$1,143.0	\$1,143.0
	H2 - Superfund: Federal Facilities Enf	\$120.0	\$68.3	\$120.0	\$69.0	\$120.0	\$65.1	\$120.0	\$81.7	\$120.0	\$11.8	\$120.0	
Total		\$1,781.0	\$1,226.4	\$1,781.0	-	-	-	-	\$669.7	\$1,781.0	\$612.8	\$1,781.0	_
Grand 7	I otal	\$8,214.0	\$7,062.9	\$8,214.0	\$6,935.3	\$7,606.0	\$6,667.6	\$7,572.0	\$3,346.7	\$3,900.0	\$2,214.6	\$7,564.0	\$4,369.0

^{*}Actuals include final obligations of New Obligation Authority (NOA) and Carryover for the Office of Enforcement and Compliance Assurance (OECA). Due to the COVID-19 pandemic, FY 2020 and FY 2021 actuals were lower than prior year travel budgets.

^{**}EPA will re-evaluate travel as part of the Agency's FY 2023 Operating Plan activities in preparation for the FY 2023 Enacted Budget.

On-Site Inspections and Off-Site Compliance Monitoring Compliance Activities From EPA's Integrated Compliance Information System¹⁴

The table below provides the numbers in EPA's Integrated Compliance Information (ICIS) data system for on-site inspection and off-site compliance monitoring activities from fiscal years (FY) 2016-2020.

Fiscal Year (FY)	On-Site Inspections	Off-Site Compliance Monitoring Activities (EPA has not set separate targets for this category of activities)	Total Completed
FY 2017 actual	8,800	3,100	11,900
FY 2018 actual	7,900	2,900	10,800
FY 2019* actual	Target:7,400 Actual: 8,100	2,200	10,329
FY 2020 actual	Target: not set** Actual: 3,600	4,900	8,500
FY 2021 actual	Target: not set** Actual: 3,200	7,600	10,800
FY 2022	Target: not set**		10,000
projection	Actual: TBD		
FY 2023 projection	Target: not set** Actual: TBD		10,000

^{*}In 2019, EPA set targets for on-site inspections only. Previous targets were for combination of on-site inspections and off-site compliance monitoring activities.

Caveats:

1. <u>Definitions</u>: Nationally consistent definitions of on-site inspections and off-site compliance monitoring activities did not exist for our compliance monitoring program until we issued guidance on April 24, 2020 (and updated in November 2020). As a result, earlier data may include mis-categorized activities. EPA's April 24, 2020 memorandum provided definitions

^{**}Targets were not set for on-site inspections in FY 2020 through FY 2023 due to travel restrictions and uncertainty resulting from COVID-19.

¹⁴ The Explanatory Statement accompanying the Consolidated Appropriations Act, 2021 instructs EPA to follow guidance as set forth in House Report 116-448. House Report 116-448 directs EPA to provide "separate targets for onsite inspections and offsite compliance monitoring activities, and separate target and actuals data for onsite and offsite compliance monitoring activities for the previous five fiscal years". Please see page 80: https://www.congress.gov/116/crpt/hrpt448/CRPT-116hrpt448.pdf. This report fulfills this requirement.

- for both on-site and off-site compliance monitoring activities, which will create more consistency in each of the categories.
- 2. <u>Incomplete Data Entry</u>: Given that EPA has not historically required most types of off-site compliance monitoring activities to be entered into an EPA database, these numbers are likely incomplete. EPA's April 24, 2020, guidance for reporting key off-site compliance monitoring activities establishes expectations for national reporting of these activities, which should result in numbers more reflective of actual activities.
- 3. <u>COVID-19</u>: Restrictions on travel during the pandemic affected EPA's ability to conduct onsite inspections in FY 2020 and FY 2021 and is continuing in FY 2022. While on-site inspection numbers dropped substantially during this time, EPA was able to increase its off-site compliance monitoring activities.
- 4. <u>States Conduct Majority of Inspections</u>: Most inspections are performed by authorized states. For example, states performed about 34,000 National Pollutant Discharge Elimination System (NPDES) inspections that is just one program.
- 5. <u>Data Mining</u>: With modern tools, EPA mines data from monitoring reports and manifests. EPA conducts off-site compliance monitoring to try to detect violations, including possible violations of emission and discharge limitations. EPA uses this information to target facilities for on-site inspections. The April 2020 and subsequent November 2020 guidances will help EPA nationally focus and track this important off-site compliance monitoring work.
- 6. <u>Totals More Reliable Than Subtotals</u>: The sum of the two subtotals (on-site inspections + offsite compliance monitoring activities) is a more reliable value because it smooths out some of the variability in each subtotal. EPA believes definitions of on-site inspections and off-site compliance monitoring activities will help make the subtotal data more reliable going forward.
- 7. <u>Staffing Levels</u>: The number of inspections EPA completes each year generally correlates with our annual staffing levels. During the time period reported in the table, OECA's number of full-time equivalents (FTEs) has decreased from 2,880 in FY 2016 to 2,423 in FY 2021.

Physicians' Comparability Allowance (PCA) Plan

Department and component:

Environmental Protection Agency

<u>Purpose</u>: The purpose of this document is to describe the Agency's plan for implementing the Physicians' Comparability Allowance (PCA) program. Per 5 CFR 595.107, the Office of Management and Budget (OMB) must approve this plan prior to the Agency entering into any PCA service agreement. Changes to this plan must be reviewed and approved by OMB in accordance with 5 CFR 595.107.

Reporting: In addition to the plan, each year, components utilizing PCA will include their PCA worksheet in the OMB Justification (OMBJ), typically in September. OMB and OPM will use this data for Budget development and congressional reporting.

Plan for Implementing the PCA program:

1a) Identify the categories of physician positions the Agency has established are covered by PCA under § 595.103. Please include the basis for each category. If applicable, list and explain the necessity of any additional physician categories designated by your agency (for categories other than I through IV-B). List Any Additional Physician Categories Designated by Your Agency: Pursuant to 5 CFR 595.107, any additional category of physician receiving a PCA, not covered by categories I through IV-B, should be listed and accompanied by an explanation as to why these categories are necessary.

Number of	Category of Physician	Covered	Basis for Category
Physicians	Position	by Agency	Dasis for Category
Receiving PCAs by	1 osition	(mark "x"	
Category (non-add)		if covered)	
Category (non-add)		ii covered)	EDALOGE CD 1 1D-1
2	Category I Clinical Position	X	EPA's Office of Research and Development (ORD) clinical physicians oversee the medical care of study subjects. These studies are conducted on the health effects of a variety of common environmental pollutants in many different human subjects. Our primary emphasis is on cardio-pulmonary responses, with recent interest in behavioral responses. The Medical Officer is responsible for the health and well-being of research participants before, during, and after research. Prior to research, the Medical Officer is responsible for clinically evaluating individuals. During research, they are responsible for instituting preventative measures to ensure that any procedure entails the least risk possible. After the research, it is the Medical Officer's responsibility to evaluate an individual's health to determine any clinical changes.
	Category II Research Position		n/a

Number of	Category of Physician	Covered	Basis for Category
Physicians	Position	by Agency	
Receiving PCAs by		(mark "x"	
Category (non-add)		if covered)	
1	Category III Occupational Health		EPA is establishing a medical staff within the Office of Administration, Safety and Sustainability Division that will serve as a focal point for pandemic planning, occupational medical surveillance, wellness, and will provide medical consultative services supporting the Agency's safety and health, disease response/outbreak, fitness for duty, diver, automated external defibrillator, emergency response, nerve agent antidote, medical countermeasures, lactation, maternal wellness, and other national programs.
	Category IV-A Disability Evaluation		n/a
1	Category IV-B Health and Medical Admin.	X	This position serves as the principal medical officer and environmental health scientist for EPA's ORD. The position is responsible for providing leadership, direction, and technical expertise in support of organizational-wide health and environmental planning, policy development and implementation, and oversight of scientific initiatives and research efforts for ORD's Assistant Administrator (AA) or their designee. This includes: Strategic Research Action Plan oversight; prioritization of environmental health research; and counsel and oversight on legislation, regulations and health impact assessments related to Executive Branch agencies on human health, air quality, ecosystem services, toxics and risks, environmental social sciences, and most notably, COVID-19.

Physicians' Comparability Allowance (PCA) Plan (continued)

- 2) Explain the recruitment and retention problem(s) for each category of physician in your agency (this should demonstrate that a current need continues to persist). § 595 of 5CFR Ch. 1 requires that an agency may determine that a significant recruitment and retention problem exists only if all of the following conditions apply:
 - Evidence indicates that the Agency is unable to recruit and retain physicians for the category;
 - The qualification requirements being sought do not exceed the qualifications necessary for successful performance of the work;
 - The Agency has made efforts to recruit and retain candidates in the category; and
 - There are not a sufficient number of qualified candidates available if no comparability allowance is paid.

Number of Physicians Receiving PCAs by Category (non-add)	Category of Physician Position	Recruitment and retention problem
2	Category I Clinical Position	The small population of EPA Clinical Physician positions experiences modest turnover. The value of the physicians' comparability allowance to EPA is used as a retention tool. The Agency is told regularly that absent the allowance some EPA physicians would seek employment at federal agencies that provide the allowance.
	Category II Research Position	n/a
1	Category III Occupational Health	The value of the physicians' comparability allowance to EPA is to be used as a recruitment and retention tool. The Agency is told regularly that absent the allowance some EPA physicians would seek employment at federal agencies that provide the allowance.
	Category IV-A Disability Evaluation	n/a
1	Category IV-B Health and Medical Admin.	The small population of EPA Health and Medical Administrative Physician position(s) experiences modest turnover. The value of the physicians' comparability allowance to EPA is used as a retention tool. The Agency is told regularly that absent the allowance some EPA physicians would seek employment at federal agencies that provide the allowance.

3) Explain how the agency determines the amounts to be used for each category of physicians.

Number of Physicians Receiving PCAs by Category (non-add)	Category of Physician Position	Basis of comparability allowance amount
2	Category I Clinical Position	EPA reviews the experience and technical expertise of the candidates. Combined with other salary ranges in the private sector and in review of other federal agencies, the Agency tries to be within a range that allows the Agency to retain the employees.
	Category II Research Position	n/a
1	Category III Occupational Health	EPA reviews the experience and technical expertise of the candidates. Combined with other salary ranges in the private sector and in review of other federal agencies, the Agency tries to be within a range that allows the Agency to retain the employees.
	Category IV-A Disability Evaluation	n/a
1	Category IV-B Health and Medical Admin.	EPA reviews the experience and technical expertise of the candidates. Combined with other salary ranges in the private sector and in review of other federal agencies, the Agency tries to be within a range that allows the Agency to retain the employees.

4) Does the Agency affirm that the PCA plan is consistent with the provisions of 5 U.S.C. 5948 and the requirements of § 595 of 5 CFR Ch. 1?

Yes

Physicians' Comparability Allowance (PCA) Worksheet

1) Department and component:

Environmental Protection Agency

2) Explain the recruitment and retention problem(s) justifying the need for the PCA pay authority.

(Please include any staffing data to support your explanation, such as number and duration of unfilled positions and number of accessions and separations per fiscal year.)

Historically, the number of EPA Research Physicians is between three and seven positions. This small population experiences modest turnover. The value of the physicians' comparability allowance to EPA is used as a retention tool.

EPA continues to use the PCA to recruit qualified candidates to fill vacancies and to retain these employees. Additionally, EPA will use the PCA in FY 2023 to recruit and retain a physician for the newly formed national health and safety medical staff.

3-4) Please complete the table below with details of the PCA agreement for the following years:

	PY 2021	CY 2022	BY* 2023
	(Actual)	(Estimates)	(Estimates)
3a) Number of Physicians Receiving PCAs	3	4	4
3b) Number of Physicians with One-Year PCA Agreements	0	0	0
3c) Number of Physicians with Multi-Year PCA Agreements	3	4	4
4a) Average Annual PCA Physician Pay (without PCA			
payment)	\$188,100	\$193,700	\$199,500
4b) Average Annual PCA Payment	\$19,300	\$19,300	\$19,300

^{*}BY data will be approved during the BY Budget cycle. Please ensure each column is completed.

5) Explain the degree to which recruitment and retention problems were alleviated in your agency through the use of PCAs in the prior fiscal year.

(Please include any staffing data to support your explanation, such as number and duration of unfilled positions and number of accessions and separations per fiscal year.)

The Agency is told regularly that absent the allowance, some EPA research physicians would seek employment at federal agencies that provide the allowance.

6) Provide any additional information that may be useful in planning PCA staffing levels and amounts in your agency.

An agency with a very small number of physician positions and a low turn-over rate among them still needs the allowance authority to maintain the stability of the small population. Those who opt for federal employment in opposition to private sector employment still want the maximum pay available in the federal sector. Were it not for the PCA, EPA would regularly lose some of its physicians to other federal agencies that offer the allowance, both requiring EPA to refill vacant positions and making it more difficult for EPA to fill those positions. Turn-over statistics should be viewed in this light.

U.S. Environmental Protection Agency FY 2023 Annual Performance Plan and Congressional Justification

Program Projects by Program Area (Dollars in Thousands)

	FY 2021 Final	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Science & Technology	12000019	· · · · · · · · · · · · · · · · · · ·	Duuget	
Clean Air and Climate				
Clean Air Allowance Trading Programs	\$4,809	\$6,793	\$8,800	\$2,007
Climate Protection	\$7,057	\$7,895	\$10,169	\$2,274
Federal Support for Air Quality Management	\$8,661	\$7,154	\$10,420	\$3,266
Federal Vehicle and Fuels Standards and Certification	\$87,233	\$96,783	\$152,209	\$55,426
Subtotal, Clean Air and Climate	\$107,760	\$118,625	\$181,598	\$62,973
Indoor Air and Radiation				
Indoor Air: Radon Program	\$112	\$157	\$157	\$0
Radiation: Protection	\$1,645	\$1,735	\$2,224	\$489
Radiation: Response Preparedness	\$3,063	\$3,096	\$4,383	\$1,287
Reduce Risks from Indoor Air	\$296	\$161	\$173	\$12
Subtotal, Indoor Air and Radiation	\$5,115	\$5,149	\$6,937	\$1,788
Enforcement				
Forensics Support	\$11,761	\$14,000	\$15,532	\$1,532
Homeland Security				
Homeland Security: Critical Infrastructure Protection	\$9,653	\$10,380	\$14,526	\$4,146
Homeland Security: Preparedness, Response, and Recovery	\$21,877	\$24,852	\$25,890	\$1,038
Homeland Security: Protection of EPA Personnel and Infrastructure	\$500	\$501	\$501	\$0
Subtotal, Homeland Security	\$32,031	\$35,733	\$40,917	\$5,184
IT / Data Management / Security				
IT / Data Management	\$2,782	\$3,072	\$3,195	\$123
Operations and Administration				
Facilities Infrastructure and Operations	\$65,093	\$67,500	\$68,912	\$1,412
Pesticides Licensing				
Pesticides: Protect Human Health from Pesticide Risk	\$2,431	\$2,803	\$2,917	\$114
Pesticides: Protect the Environment from Pesticide Risk	\$1,805	\$2,207	\$2,252	\$45
Pesticides: Realize the Value of Pesticide Availability	\$645	\$876	\$984	\$108
Subtotal, Pesticides Licensing	\$4,881	\$5,886	\$6,153	\$267

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Research: Air, Climate and Energy	recturis	Ammunized CR	Buuger	Ammunized Cit
Research: Air, Climate and Energy	\$76,733	\$95,250	\$132,924	\$37,674
Research: Safe and Sustainable Water Resources				
Research: Safe and Sustainable Water Resources	\$92,719	\$112,250	\$119,286	\$7,036
research, sure and sustainable water resources	Ψ72,717	ψ112,230	ψ117,200	ψ7,030
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	\$112,717	\$133,000	\$141,477	\$8,477
Research: Chemical Safety for Sustainability				
Health and Environmental Risk Assessment	\$35,251	\$37,482	\$42,355	\$4,873
Research: Chemical Safety for Sustainability				
Endocrine Disruptors	\$13,859	\$16,253	\$17,095	\$842
Computational Toxicology	\$18,509	\$21,406	\$22,542	\$1,136
Research: Chemical Safety for Sustainability (other activities)	\$43,598	\$51,859	\$58,456	\$6,597
Subtotal, Research: Chemical Safety for Sustainability	\$75,966	\$89,518	\$98,093	\$8,575
Subtotal, Research: Chemical Safety for Sustainability	\$111,217	\$127,000	\$140,448	\$13,448
Ensure Safe Water (formerly Water: Human Health Protection)**				
Drinking Water Programs	\$4,088	\$4,364	\$6,776	\$2,412
Clean and Safe Water Technical Assistance Grants				
Water Quality Research and Support Grants	\$0	\$7,500	\$0	-\$7,500
Total, Science & Technology	\$626,895	\$729,329	\$864,155	\$134,826
Environmental Programs & Management				
Clean Air and Climate				
Clean Air Allowance Trading Programs	\$12,920	\$13,153	\$23,523	\$10,370
Climate Protection	\$91,632	\$97,000	\$125,216	\$28,216
Federal Stationary Source Regulations	\$19,317	\$20,733	\$41,617	\$20,884
Federal Support for Air Quality Management	\$131,015	\$138,020	\$289,010	\$150,990
Stratospheric Ozone: Domestic Programs	\$4,805	\$4,633	\$26,607	\$21,974
Stratospheric Ozone: Multilateral Fund	\$8,326	\$8,711	\$18,000	\$9,289
Subtotal, Clean Air and Climate	\$268,013	\$282,250	\$523,973	\$241,723
Indoor Air and Radiation				
Indoor Air: Radon Program	\$2,224	\$3,136	\$5,004	\$1,868
Radiation: Protection	\$8,283	\$7,661	\$10,588	\$2,927

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Radiation: Response Preparedness	\$2,703	\$2,404	\$3,004	\$600
Reduce Risks from Indoor Air	\$10,968	\$11,750	\$23,542	\$11,792
Subtotal, Indoor Air and Radiation	\$24,178	\$24,951	\$42,138	\$17,187
Brownfields				
Brownfields	\$22,136	\$24,000	\$36,842	\$12,842
Compliance				
Compliance Monitoring	\$97,583	\$102,500	\$144,770	\$42,270
Environmental Justice				
Environmental Justice	\$10,343	\$11,838	\$294,938	\$283,100
Enforcement				
Civil Enforcement	\$164,888	\$168,341	\$210,011	\$41,670
Criminal Enforcement	\$49,588	\$51,275	\$61,411	\$10,136
NEPA Implementation	\$15,809	\$16,943	\$19,883	\$2,940
Subtotal, Enforcement	\$230,285	\$236,559	\$291,305	\$54,746
Geographic Programs				
Geographic Program: Chesapeake Bay	\$77,876	\$87,500	\$90,568	\$3,068
Geographic Program: Gulf of Mexico	\$5,335	\$20,000	\$22,524	\$2,524
Geographic Program: Lake Champlain	\$14,996	\$15,000	\$20,000	\$5,000
Geographic Program: Long Island Sound	\$30,361	\$30,400	\$40,002	\$9,602
Geographic Program: Other				
Lake Pontchartrain	\$0	\$1,900	\$1,932	\$32
S.New England Estuary (SNEE)	\$5,152	\$5,500	\$6,252	\$752
Geographic Program: Other (other activities)	\$1,579	\$3,000	\$3,024	\$24
Subtotal, Geographic Program: Other	\$6,731	\$10,400	\$11,208	\$808
Great Lakes Restoration	\$306,380	\$330,000	\$340,111	\$10,111
Geographic Program: South Florida	\$1,369	\$6,000	\$7,202	\$1,202
Geographic Program: San Francisco Bay	\$6,718	\$8,922	\$12,004	\$3,082
Geographic Program: Puget Sound	\$32,946	\$33,750	\$35,016	\$1,266
Subtotal, Geographic Programs	\$482,712	\$541,972	\$578,635	\$36,663
Homeland Security				
Homeland Security: Communication and Information	\$3,893	\$4,145	\$4,650	\$505
Homeland Security: Critical Infrastructure Protection	\$733	\$909	\$1,014	\$105
Homeland Security: Protection of EPA Personnel and Infrastructure	\$4,915	\$4,959	\$5,139	\$180
Subtotal, Homeland Security	\$9,540	\$10,013	\$10,803	\$790

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Information Exchange / Outreach				
State and Local Prevention and Preparedness	\$13,402	\$13,736	\$22,908	\$9,172
TRI / Right to Know	\$12,689	\$13,206	\$13,675	\$469
Tribal - Capacity Building	\$12,945	\$12,902	\$16,386	\$3,484
Executive Management and Operations	\$48,837	\$46,836	\$63,256	\$16,420
Environmental Education	\$3,311	\$8,580	\$8,668	\$88
Exchange Network	\$13,713	\$14,084	\$14,413	\$329
Small Minority Business Assistance	\$1,756	\$1,680	\$1,935	\$255
Small Business Ombudsman	\$1,250	\$1,778	\$2,183	\$405
Children and Other Sensitive Populations: Agency Coordination	\$8,277	\$6,173	\$6,362	\$189
Subtotal, Information Exchange / Outreach	\$116,181	\$118,975	\$149,786	\$30,811
International Programs				
US Mexico Border	\$2,818	\$2,837	\$3,275	\$438
International Sources of Pollution	\$6,409	\$6,746	\$11,758	\$5,012
Trade and Governance	\$5,894	\$5,292	\$6,187	\$895
Subtotal, International Programs	\$15,121	\$14,875	\$21,220	\$6,345
IT / Data Management / Security				
Information Security	\$6,765	\$8,285	\$23,739	\$15,454
IT / Data Management	\$74,013	\$82,715	\$98,452	\$15,737
Subtotal, IT / Data Management / Security	\$80,777	\$91,000	\$122,191	\$31,191
Legal / Science / Regulatory / Economic Review				
Integrated Environmental Strategies	\$9,614	\$9,475	\$40,912	\$31,437
Administrative Law	\$3,768	\$4,975	\$5,882	\$907
Alternative Dispute Resolution	\$533	\$864	\$1,175	\$311
Civil Rights Program	\$8,968	\$9,205	\$25,869	\$16,664
Legal Advice: Environmental Program	\$55,700	\$49,595	\$76,855	\$27,260
Legal Advice: Support Program	\$16,645	\$15,865	\$18,892	\$3,027
Regional Science and Technology	\$466	\$638	\$4,923	\$4,285
Science Advisory Board	\$3,422	\$3,205	\$3,981	\$776
Regulatory/Economic-Management and Analysis	\$13,850	\$12,421	\$16,247	\$3,826
Subtotal, Legal / Science / Regulatory / Economic Review	\$112,967	\$106,243	\$194,736	\$88,493
Operations and Administration				
Central Planning, Budgeting, and Finance	\$71,528	\$76,718	\$89,154	\$12,436
Facilities Infrastructure and Operations	\$257,524	\$285,441	\$288,293	\$2,852
Acquisition Management	\$30,623	\$32,247	\$40,017	\$7,770
Human Resources Management	\$48,256	\$46,229	\$66,087	\$19,858

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Financial Assistance Grants / IAG Management	\$27,294	\$25,430	\$33,040	\$7,610
Subtotal, Operations and Administration	\$435,225	\$466,065	\$516,591	\$50,526
Pesticides Licensing				
Science Policy and Biotechnology	\$1,287	\$1,546	\$1,580	\$34
Pesticides: Protect Human Health from Pesticide Risk	\$58,124	\$60,181	\$62,726	\$2,545
Pesticides: Protect the Environment from Pesticide Risk	\$36,714	\$39,543	\$45,876	\$6,333
Pesticides: Realize the Value of Pesticide Availability	\$6,034	\$7,730	\$7,979	\$249
Subtotal, Pesticides Licensing	\$102,159	\$109,000	\$118,161	\$9,161
Research: Chemical Safety for Sustainability				
Research: Chemical Safety for Sustainability	\$115	\$0	\$0	\$0
Resource Conservation and Recovery Act (RCRA)				
RCRA: Corrective Action	\$33,921	\$38,453	\$39,820	\$1,367
RCRA: Waste Management	\$59,769	\$70,465	\$79,743	\$9,278
RCRA: Waste Minimization & Recycling	\$8,404	\$9,982	\$10,444	\$462
Subtotal, Resource Conservation and Recovery Act (RCRA)	\$102,095	\$118,900	\$130,007	\$11,107
Toxics Risk Review and Prevention				
Endocrine Disruptors	\$5,209	\$7,533	\$7,614	\$81
Pollution Prevention Program	\$11,476	\$12,558	\$17,121	\$4,563
Toxic Substances: Chemical Risk Review and Reduction	\$72,643	\$60,280	\$124,243	\$63,963
Toxic Substances: Lead Risk Reduction Program	\$11,991	\$13,129	\$13,749	\$620
Subtotal, Toxics Risk Review and Prevention	\$101,318	\$93,500	\$162,727	\$69,227
Underground Storage Tanks (LUST / UST)				
LUST / UST	\$10,373	\$11,250	\$12,564	\$1,314
Ensure Clean Water (formerly Water Quality Protection)**				
National Estuary Program / Coastal Waterways	\$29,496	\$31,822	\$32,184	\$362
Wetlands	\$18,562	\$19,300	\$25,637	\$6,337
Subtotal, Ensure Clean Water	\$48,058	\$51,122	\$57,821	\$6,699
Ensure Safe Water (formerly Water: Human Health Protection)**				
Beach / Fish Programs	\$1,146	\$1,584	\$1,827	\$243
Drinking Water Programs	\$97,190	\$106,903	\$133,258	\$26,355
Subtotal, Ensure Safe Water	\$98,335	\$108,487	\$135,085	\$26,598

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Ensure Clean Water (formerly Water Quality Protection)**				
Marine Pollution	\$8,206	\$9,468	\$12,299	\$2,831
Surface Water Protection	\$197,137	\$206,882	\$239,688	\$32,806
Subtotal, Ensure Clean Water	\$205,343	\$216,350	\$251,987	\$35,637
Clean and Safe Water Technical Assistance Grants				
Water Quality Research and Support Grants	\$0	\$21,700	\$0	-\$21,700
Total, Environmental Programs & Management	\$2,572,857	\$2,761,550	\$3,796,280	\$1,034,730
Inspector General				
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	\$38,174	\$43,500	\$55,865	\$12,365
Total, Inspector General	\$38,174	\$43,500	\$55,865	\$12,365
Building and Facilities				
Homeland Security				
Homeland Security: Protection of EPA Personnel and Infrastructure	\$7,006	\$6,676	\$6,676	\$0
Operations and Administration				
Facilities Infrastructure and Operations	\$36,071	\$27,076	\$73,894	\$46,818
Total, Building and Facilities	\$43,076	\$33,752	\$80,570	\$46,818
Hazardous Substance Superfund				
Indoor Air and Radiation				
Radiation: Protection	\$1,973	\$1,985	\$2,872	\$887
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	\$11,634	\$11,586	\$12,062	\$476
Compliance				
Compliance Monitoring	\$1,778	\$1,000	\$1,015	\$15
Environmental Justice				
Environmental Justice	\$681	\$826	\$5,876	\$5,050
Enforcement				
Criminal Enforcement	\$8,469	\$7,647	\$8,088	\$441

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Forensics Support	\$1,250	\$1,145	\$1,263	\$118
Superfund: Enforcement	\$164,461	\$156,773	\$166,487	\$9,714
Superfund: Federal Facilities Enforcement	\$6,974	\$7,424	\$9,863	\$2,439
Subtotal, Enforcement	\$181,153	\$172,989	\$185,701	\$12,712
Homeland Security				
Homeland Security: Preparedness, Response, and Recovery	\$31,897	\$33,020	\$43,796	\$10,776
Homeland Security: Protection of EPA Personnel and Infrastructure	\$845	\$1,030	\$1,530	\$500
Subtotal, Homeland Security	\$32,742	\$34,050	\$45,326	\$11,276
Information Exchange / Outreach				
Exchange Network	\$1,511	\$1,328	\$1,328	\$0
IT / Data Management / Security				
Information Security	\$752	\$659	\$7,859	\$7,200
IT / Data Management	\$20,984	\$13,826	\$16,904	\$3,078
Subtotal, IT / Data Management / Security	\$21,735	\$14,485	\$24,763	\$10,278
Legal / Science / Regulatory / Economic Review				
Alternative Dispute Resolution	\$632	\$832	\$868	\$36
Legal Advice: Environmental Program	\$1,161	\$443	\$461	\$18
Subtotal, Legal / Science / Regulatory / Economic Review	\$1,793	\$1,275	\$1,329	\$54
Operations and Administration				
Central Planning, Budgeting, and Finance	\$26,775	\$26,561	\$28,806	\$2,245
Facilities Infrastructure and Operations	\$81,976	\$68,727	\$71,219	\$2,492
Acquisition Management	\$23,380	\$23,800	\$32,345	\$8,545
Human Resources Management	\$7,200	\$6,202	\$8,476	\$2,274
Financial Assistance Grants / IAG Management	\$4,224	\$3,210	\$4,403	\$1,193
Subtotal, Operations and Administration	\$143,554	\$128,500	\$145,249	\$16,749
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	\$13,458	\$16,463	\$16,927	\$464
Research: Chemical Safety for Sustainability				
Health and Environmental Risk Assessment	\$3,654	\$12,824	\$4,896	-\$7,928
Research: Chemical Safety for Sustainability	\$6,065	\$0	\$8,060	\$8,060
Subtotal, Research: Chemical Safety for Sustainability	\$9,719	\$12,824	\$12,956	\$132
Superfund Cleanup				
Superfund: Emergency Response and Removal	\$233,104	\$190,000	\$199,835	\$9,835

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Superfund: EPA Emergency Preparedness	\$7,555	\$7,700	\$8,056	\$356
Superfund: Federal Facilities	\$24,264	\$21,800	\$36,272	\$14,472
Superfund: Remedial	\$639,714	\$589,000	\$454,601	-\$134,399
Subtotal, Superfund Cleanup	\$904,636	\$808,500	\$698,764	-\$109,736
Total, Hazardous Substance Superfund	\$1,326,363	\$1,205,811	\$1,154,168	-\$51,643
Leaking Underground Storage Tanks				
Enforcement				
Civil Enforcement	\$625	\$620	\$653	\$33
Operations and Administration				
Central Planning, Budgeting, and Finance	\$343	\$416	\$448	\$32
Facilities Infrastructure and Operations	\$932	\$836	\$724	-\$112
Acquisition Management	\$245	\$132	\$132	\$0
Subtotal, Operations and Administration	\$1,520	\$1,384	\$1,304	-\$80
Underground Storage Tanks (LUST / UST)				
LUST / UST	\$9,561	\$9,470	\$9,811	\$341
LUST Cooperative Agreements	\$55,438	\$55,040	\$55,040	\$0
LUST Prevention	\$25,383	\$25,369	\$26,669	\$1,300
Subtotal, Underground Storage Tanks (LUST / UST)	\$90,382	\$89,879	\$91,520	\$1,641
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	\$303	\$320	\$337	\$17
Total, Leaking Underground Storage Tanks	\$92,830	\$92,203	\$93,814	\$1,611
Inland Oil Spill Programs				
Compliance				
Compliance Monitoring	\$132	\$139	\$2,146	\$2,007
Enforcement				
Civil Enforcement	\$2,532	\$2,413	\$2,538	\$125
Oil				
Oil Spill: Prevention, Preparedness and Response	\$15,160	\$16,200	\$20,503	\$4,303
Operations and Administration				
Facilities Infrastructure and Operations	\$628	\$682	\$641	-\$41

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	\$1,149	\$664	\$674	\$10
Total, Inland Oil Spill Programs	\$19,601	\$20,098	\$26,502	\$6,404
State and Tribal Assistance Grants				
State and Tribal Assistance Grants (STAG)				
Infrastructure Assistance: Alaska Native Villages	\$36,607	\$36,186	\$40,000	\$3,814
Brownfields Projects	\$101,296	\$90,982	\$130,982	\$40,000
Infrastructure Assistance: Clean Water SRF	\$1,788,798	\$1,638,826	\$1,638,847	\$21
Infrastructure Assistance: Drinking Water SRF	\$1,224,269	\$1,126,088	\$1,126,095	\$7
Infrastructure Assistance: Mexico Border	\$19,591	\$30,000	\$30,000	\$0
Diesel Emissions Reduction Grant Program	\$87,360	\$90,000	\$150,000	\$60,000
Targeted Airshed Grants	\$52,895	\$59,000	\$59,000	\$0
San Juan Watershed Monitoring (formerly Gold King Mine Water Monitoring)**	\$6,363	\$4,000	\$4,000	\$0
Safe Water for Small & Disadvantaged Communities	\$45,312	\$26,408	\$80,002	\$53,594
Reducing Lead in Drinking Water	\$40,053	\$21,511	\$182,002	\$160,491
Lead Testing in Schools	\$19,430	\$26,500	\$36,500	\$10,000
Drinking Water Infrastructure Resilience and Sustainability	\$0	\$4,000	\$25,000	\$21,000
Technical Assistance for Wastewater Treatment Works (formerly Technical Assistance for Treatment Works)**	\$0	\$18,000	\$18,000	\$0
Sewer Overflow and Stormwater Reuse Grants (formerly Sewer Overflow and Stormwater Control Grants)**	\$6,308	\$40,000	\$280,000	\$240,000
Water Infrastructure Workforce Investment (formerly Water Infrastructure and Workforce Investment)**	\$0	\$3,000	\$17,711	\$14,711
Technical Assistance and Grants for Emergencies (SDWA)	\$0	\$0	\$35,000	\$35,000
Technical Assistance and Grants for Emergencies, Small Systems	\$0	\$0	\$15,000	\$15,000
Source Water Petition Program	\$0	\$0	\$5,000	\$5,000
Voluntary Connections to Public Water Systems	\$0	\$0	\$20,000	\$20,000
Underserved Communities Grant to Meet SDWA Requirements	\$0	\$0	\$50,000	\$50,000
Small System Water Loss Identification and Prevention	\$0	\$0	\$50,000	\$50,000
Midsize and Large Drinking Water System Infrastructure Resilience and Sustainability	\$0	\$0	\$50,000	\$50,000
Indian Reservation Drinking Water Program	\$0	\$0	\$50,000	\$50,000
Advanced Drinking Water Technologies	\$0	\$0	\$10,000	\$10,000

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Clean Water Act Research, Investigations, Training, and Information	\$0	\$0	\$75,000	\$75,000
Wastewater Efficiency Grant Pilot Program	\$0	\$0	\$20,000	\$20,000
Clean Water Infrastructure Resiliency and Sustainability Program	\$0	\$0	\$25,000	\$25,000
Small and Medium Publicly Owned Treatment Works Circuit Rider Program	\$0	\$0	\$10,000	\$10,000
Grants for Low and Moderate income Household Decentralized Wastewater Systems	\$0	\$0	\$50,000	\$50,000
Connection to Publicly Owned Treatment Works	\$0	\$0	\$40,000	\$40,000
Water Data Sharing Pilot Program	\$0	\$0	\$15,000	\$15,000
Stormwater Infrastructure Technology	\$0	\$0	\$5,000	\$5,000
Stormwater Control Infrastructure Project Grants	\$0	\$0	\$10,000	\$10,000
Alternative Water Sources Grants Pilot Program	\$0	\$0	\$25,000	\$25,000
Enhanced Aquifer Use and Recharge	\$0	\$0	\$5,000	\$5,000
Water Sector Cybersecurity	\$0	\$0	\$25,000	\$25,000
Subtotal, State and Tribal Assistance Grants (STAG)	\$3,428,280	\$3,214,501	\$4,408,139	\$1,193,638
Categorical Grants				
Categorical Grant: Nonpoint Source (Sec. 319)	\$180,139	\$177,000	\$188,999	\$11,999
Categorical Grant: Public Water System Supervision (PWSS)	\$110,341	\$112,000	\$132,566	\$20,566
Categorical Grant: State and Local Air Quality Management	\$241,186	\$229,500	\$322,198	\$92,698
Categorical Grant: Radon	\$8,685	\$7,795	\$12,487	\$4,692
Categorical Grant: Pollution Control (Sec. 106)				
Monitoring Grants	\$15,458	\$17,267	\$18,515	\$1,248
Categorical Grant: Pollution Control (Sec. 106) (other activities)	\$212,284	\$212,733	\$233,023	\$20,290
Subtotal, Categorical Grant: Pollution Control (Sec. 106)	\$227,741	\$230,000	\$251,538	\$21,538
Categorical Grant: Wetlands Program Development	\$10,111	\$14,192	\$15,079	\$887
Categorical Grant: Underground Injection Control (UIC)	\$10,604	\$11,164	\$11,387	\$223
Categorical Grant: Pesticides Program Implementation	\$12,148	\$12,294	\$14,027	\$1,733
Categorical Grant: Lead	\$15,895	\$14,275	\$24,639	\$10,364
Resource Recovery and Hazardous Waste Grants (formerly Categorical Grant: Hazardous Waste Financial Assistance)**	\$110,760	\$101,500	\$118,247	\$16,747
Categorical Grant: Pesticides Enforcement	\$24,321	\$24,000	\$25,580	\$1,580
Categorical Grant: Pollution Prevention	\$5,022	\$4,630	\$5,775	\$1,145
Categorical Grant: Toxics Substances Compliance	\$6,151	\$4,760	\$6,877	\$2,117
Categorical Grant: Tribal General Assistance Program	\$69,308	\$66,250	\$85,009	\$18,759
Categorical Grant: Underground Storage Tanks	\$1,475	\$1,475	\$1,505	\$30

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Categorical Grant: Tribal Air Quality Management	\$12,964	\$13,415	\$23,126	\$9,711
Categorical Grant: Environmental Information	\$9,866	\$9,336	\$15,000	\$5,664
Categorical Grant: Beaches Protection	\$10,863	\$9,619	\$9,811	\$192
Categorical Grant: Brownfields	\$46,752	\$46,195	\$46,954	\$759
Categorical Grant: Multipurpose Grants	\$14,297	\$10,000	\$10,200	\$200
Subtotal, Categorical Grants	\$1,128,627	\$1,099,400	\$1,321,004	\$221,604
Clean and Safe Water Technical Assistance Grants (formerly Congressional Priorities)**				
Water Quality Research and Support Grants	\$365	\$0	\$0	\$0
Total, State and Tribal Assistance Grants	\$4,557,273	\$4,313,901	\$5,729,143	\$1,415,242
Hazardous Waste Electronic Manifest System Fund				
Resource Conservation and Recovery Act (RCRA)				
RCRA: Waste Management	\$21,498	\$0	\$0	\$0
Operations and Administration				
Central Planning, Budgeting, and Finance	\$154	\$0	\$0	\$0
Total, Hazardous Waste Electronic Manifest System Fund	\$21,652	\$0	\$0	\$0
Water Infrastructure Finance and Innovation Fund				
Ensure Clean Water (formerly Water Quality Protection)**				
Water Infrastructure Finance and Innovation	\$79,800	\$65,000	\$80,344	\$15,344
Total, Water Infrastructure Finance and Innovation Fund	\$79,800	\$65,000	\$80,344	\$15,344
Subtotal, EPA	\$9,378,522	\$9,265,144	\$11,880,841	\$2,615,697
Cancellation of Funds	\$0	-\$27,991	\$0	\$27,991
TOTAL, EPA	\$9,378,522	\$9,237,153	\$11,880,841	\$2,643,688

^{*}For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

** These programs have proposed for name change in the FY 2023 President's Budget.

Eliminated Programs

Eliminated Program Projects

Water Quality Research and Support Grants

(FY 2023 President's Budget: \$0.0, 0.0 FTE)

This program is proposed for elimination in the FY 2023 President's Budget. Work to advance water quality protection can be accomplished within core statutory programs funded in the Budget request. This program focuses on water quality and water availability research, the development and application of water quality criteria, the implementation of watershed management approaches, and the application of technological options to restore and protect water bodies. For training and technical assistance aspects of the Program, states have the ability to develop technical assistance plans for their water systems using Public Water System Supervision funds and set-asides from the Drinking Water State Revolving Fund (DWSRF). For research and development components of the Program, EPA was instructed by Congress to award grants on a competitive basis, independent of the Science to Achieve Results (STAR) program and give priority to not-for-profit organizations that: conduct activities that are national in scope; can provide a twenty-five percent match, including in-kind contributions; and often partner with the Agency.

Proposed FY 2023 Administrative Provisions

To further clarify proposed Administrative Provisions that involve more than a simple annual extension or propose a modification to an existing provision, the following information is provided.

Pesticide Licensing Fee Spending Restrictions

Statutory language in the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and Pesticide Registration Improvement Extension Act of 2018 (PRIA-4), signed into law by the President on March 8, 2019, restricts what activities EPA can fund from collections deposited in the Reregistration and Expedited Processing Revolving Fund and Pesticide Registration Fund. The FY 2023 Budget Request carries forward the proposed statutory language from the FY 2022 President's Budget to allow registration service fees to be spent on additional activities related to registration of pesticides, such as processing and review of submitted data, laboratory support and audits, and rulemaking support.

The following proposed statutory language would ease spending restrictions related to PRIA registration service fees.

PRIA registration service fees:

The carrying forward of language specifying that PRIA fees collected in FY 2023 will remain available until expended would simplify aspects of budget execution. The proposal to allow EPA to collect and spend PRIA fees in FY 2023 and to authorize expanded use of PRIA fee collections is below.

The Administrator of the Environmental Protection Agency is authorized to collect and obligate pesticide registration service fees in accordance with section 33 of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136w–8): Provided, That such fees collected shall remain available until expended.

Notwithstanding section 33(d)(2) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 U.S.C. 136w–8(d)(2)), the Administrator of the Environmental Protection Agency may assess fees under section 33 of FIFRA (7 U.S.C. 136w–8) for fiscal year 2023.

Notwithstanding any other provision of law, in addition to the activities specified in section 33 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 U.S.C. 136w-8), fees collected in this and prior fiscal years under such section shall be available for the following activities as they relate to pesticide licensing: processing and review of data submitted in association with a registration, information submitted pursuant to section 6(a)(2) of FIFRA (7 U.S.C. 136d(a)(2)), supplemental distributor labels, transfers of registrations and data compensation rights, additional uses registered by states under section 24(c) of FIFRA (7 U.S.C. 136v(c)), data compensation petitions, reviews of minor amendments, and notifications; review of applications for emergency exemptions under section 18 of FIFRA (7 U.S.C. 136p) and ensuring data collection activities, laboratory support and audits; administrative support; risk communication activities;

development of policy and guidance; rulemaking support; information collection activities; and the portions of salaries related to work in these areas.

Hazardous Waste Electronic Manifest

The Hazardous Waste Electronic Manifest Establishment Act (Public Law 112-195) provides EPA with the authority to establish a program to finance, develop, and operate a system for the electronic submission of hazardous waste manifests supported by user fees. In FY 2023, EPA will operate the e-Manifest system and the Agency anticipates collecting and depositing approximately \$26.6 million in e-Manifest user fees into the Hazardous Waste Electronic Manifest System Fund. Based upon authority to collect and spend e-Manifest fees provided by Congress in annual appropriations bills, the fees will be utilized for the operation of the system and necessary program expenses. Fees will fully support the e-Manifest program, including future development costs. In recent appropriations acts, Congress has provided an advance on the appropriation for the e-Manifest program, to be reduced by the amount of fees collected so as to result in a final fiscal year appropriation of \$0. Because the program is now fully operational and fee-supported, this language is no longer necessary. The language to authorize collection and spending of the fees is below. Language specifying that e-Manifest fees collected in FY 2023 will remain available until expended would simplify aspects of budget execution.

Propose a modification to the existing provision:

The Administrator of the Environmental Protection Agency is authorized to collect and obligate fees in accordance with section 3024 of the Solid Waste Disposal Act (42 U.S.C. 6939g) for fiscal year 2023, to remain available until expended.

Change to Buildings and Facilities Per Project Threshold

The Building and Facilities threshold was last increased from \$85,000 to \$150,000 in FY 2013. Since 2013, costs for construction, material, and labor have increased significantly. EPA is proposing to reflect these cost increases by raising the per project threshold from \$150,000 to \$350,000. The \$350,000 threshold will apply to the S&T, EPM, OIG, Superfund, and LUST appropriations and will allow the programs to proceed effectively and efficiently to address immediate, urgent and smaller-scale facility improvements and will enable the Agency to maintain adequate operations, further mission-critical activities and implement climate sustainability and resiliency enhancements.

Propose a modification to the existing provision:

The Science and Technology, Environmental Programs and Management, Office of Inspector General, Hazardous Substance Superfund, and Leaking Underground Storage Tank Trust Fund Program Accounts, are available for the construction, alteration, repair, rehabilitation, and renovation of facilities provided that the cost does not exceed \$350,000 per project.

Service Fees for the Administration of the Toxic Substances Control Act (TSCA Fees Rule)

On June 22, 2016, the "Frank R. Lautenberg Chemical Safety for the 21st Century Act" (P.L. 114-182) was signed into law, amending numerous sections of the Toxic Substances Control Act (TSCA). The amendments provide authority to the Agency to establish fees for certain activities under Sections 4, 5, and 6 of TSCA, as amended, to defray 25 percent of the costs of administering these sections and requirements under Section 14. The amendments removed the previous cap that the Agency may charge for pre-manufacturing notification reviews. Fees collected under the TSCA Fees Rule¹⁵ will be deposited in the TSCA Service Fee Fund for use by EPA. Fees under this structure began to be incurred through EPA rulemaking on October 1, 2018 and replace the former Pre-Manufacturing Notification Fees. In recent appropriations acts, Congress has provided an advance on the appropriation for the TSCA program, to be reduced by the amount of fees collected, so as to result in a final fiscal year appropriation of \$0. Because the program began collecting fees in FY 2019, this language is no longer necessary and was not included in the FY 2022 President's Budget. Language specifying that TSCA fees collected in FY 2023 will remain available until expended would simplify aspects of budget execution.

Propose a modification to an existing provision:

The Administrator of the Environmental Protection Agency is authorized to collect and obligate fees in accordance with section 26(b) of the Toxic Substances Control Act (15 U.S.C. 2625(b)) for fiscal year 2023, to remain available until expended.

Student Services Contracting Authority

In the FY 2023 Budget Request, the Agency requests authorization for the Office of Research and Development (ORD), the Office of Chemical Safety and Pollution Prevention (OCSPP), and the Office of Water (OW) to hire pre-baccalaureate and post-baccalaureate students in science and engineering fields. This authority would provide ORD, OCSPP, and OW with the flexibility to hire qualified students that work on projects that support current priorities, programmatic functions, and the Agency's environmental goals.

Proposed Language to add to FY 2023 Budget:

For fiscal years 2022 through 2027, the Office of Chemical Safety and Pollution Prevention and the Office of Water may, using funds appropriated under the headings "Environmental Programs and Management" and "Science and Technology," contract directly with individuals or indirectly with institutions or nonprofit organizations, without regard to 41 U.S.C. 5, for the temporary or intermittent personal services of students or recent graduates, who shall be considered employees for the purposes of chapters 57 and 81 of title 5, United States Code, relating to compensation for travel and work injuries, and chapter 171 of title 28, United States Code, relating to tort claims, but shall not be considered to be Federal employees for any other purpose: Provided, That amounts used for this purpose by the Office of Chemical Safety and Pollution Prevention and the Office of Water collectively may not exceed \$2,000,000 per year.

¹⁵ For additional information, please refer to: https://www.epa.gov/tsca-fees/fees-administration-toxic-substances-control-act.

Special Accounts and Aircraft for Superfund Response Actions

31 U.S.C. 1343(d) generally states that appropriated funds are not available for aircraft unless "the appropriation specifically authorizes" its use for such purpose. The FY 2020 Further Consolidated Appropriations Act (P.L. 116-94) made EPA's annually appropriated Superfund Trust Fund money available to hire, maintain, and operate aircraft for the purposes of carrying out the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). However, the FY 2020 Further Consolidated Appropriations Act did not include specific authority for EPA to also use funds recovered from Potentially Responsible Parties — which are deposited into Superfund "special accounts" and made available to EPA in a separate, permanent indefinite appropriation — for aircraft. Accordingly, in the FY 2023 Budget, the Agency requests parity in authority to use Superfund special account funds for aircraft, so that EPA may carry out CERCLA response actions funded with special account money in the same manner as the Agency would with annually appropriated Superfund money.

Proposed Language to add to FY 2023 Budget:

The appropriation provided by 42 U.S.C. 9622(b)(3) is available for the hire, maintenance, and operation of aircraft.

Title 42 Hiring Authority

EPA is requesting the same language for its Title 42 Authority as proposed in the FY 2022 President's Budget. This would include a cap of 25 hires for OCSPP and 75 Hires for ORD. ORD currently uses this authority to fill highly competitive, PhD-level positions where recruiting through the GS system is not appropriate. ORD has a robust process for managing the program, including an Operations Manual that provides requirements on recruiting, compensation, ethics, and term renewals. OCSPP faces similar challenges in hiring specialized talent.

Proposed Language to add to FY 2023 Budget:

The Administrator may, after consultation with the Office of Personnel Management, employ up to seventy-five persons at any one time in the Office of Research and Development and twenty-five persons at any one time in the Office of Chemical Safety and Pollution Prevention under the authority provided in 42 U.S.C. 209, through fiscal year 2025.

Working Capital Fund Authority

On December 12, 2017, the Modernizing Government Technology (MGT Act) ¹⁶ was signed into law, authorizing CFO-Act agencies to set up information technology (IT) specific WCFs, which allows them to fund IT modernization projects and reinvest savings for additional modernization projects in the future. In the FY 2023 Budget, the Agency requests language be added to clarify and ensure that EPA has the ability to utilize funds deposited into EPA's WCF to modernize and develop the Agency's IT systems. The Agency has a well-established WCF where nearly 80

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¹⁶ For more information on the MGT Act, please refer to Section G of the National Defense Authorization Act for Fiscal Year 2018 (Public Law 115-91): https://www.congress.gov/115/plaws/publ91/PLAW-115publ91.pdf.

percent of the current service offerings are IT related. Establishing a separate IT WCF would be duplicative and more costly than to utilize the Agency's existing WCF. By seeking the proposed authorizing language change, EPA will clarify its existing authority and harmonize it with the intent of what Congress envisioned in the passage of the MGT Act.

Proposed Language to add to FY 2023 Budget:

The Environmental Protection Agency Working Capital Fund, 42 U.S.C. 4370e, is available for expenses and equipment necessary for modernization and development of information technology of, or for use by, the Environmental Protection Agency

U.S. Environmental Protection Agency Plan for Implementing the Policies and Directives of Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

The U.S. Environmental Protection Agency (EPA) is committed to honoring tribal sovereignty and including tribal voices in policy deliberations, as called for in President Biden's January 26, 2021 memorandum on Nation-to-Nation relationships with American Indian and Alaska Native Tribal Nations. EPA has a long history of engagement and consultation with tribal governments. In 2011, it was among the first federal agencies to issue a tribal consultation policy, and in the 10 years since the policy was issued, EPA has conducted more than 680 tribal consultations. Implementation of EPA's consultation policy remains a top priority for the Agency. EPA strives to learn from its past consultations and ongoing engagements with federally recognized Indian tribes. This plan, which builds upon EPA's existing policies and practices, identifies current and future actions the Agency is taking to meet the directives of Executive Order 13175 and to build on and strengthen its consultation policies and practices.

1. Introduction

In his January 26, 2021 memorandum, <u>Tribal Consultation and Strengthening Nation-to-Nation Relationships</u>, President Biden affirmed: (1) respect for tribal sovereignty and self-governance, (2) commitment to fulfilling federal trust and treaty responsibilities to tribal nations, and (3) regular, meaningful, and robust consultation with tribal nations as cornerstones of federal Indian policy. The memorandum also reaffirmed both <u>Executive Order (EO) 13175: Consultation and Coordination with Indan Tribal Governments</u>, which requires all federal agencies to engage in regular and meaningful tribal consultation in formulating or implementing policies that have tribal implications, and the November 2009 <u>Presidential Memorandum on Tribal Consultation</u>, which requires each federal agency to implement the policies and directives of EO 13175.

The 2021 memorandum directs federal agencies to submit a detailed plan of actions that agencies will take to implement the policies and directives of EO 13175, developed in consultation with tribal nations and tribal officials, within 90 days of the date of the presidential memorandum (April 26, 2021).

I. Consultation and Coordination Process for Developing EPA's Plan for Implementing EO 13175

In accordance with this directive, EPA held a tribal consultation and coordination period from March 1 - 31, 2021, to obtain tribal input on improving implementation of its consultation policies and practices, pursuant to the policies and directives of EO 13175. EPA received 27 written comment letters from tribes and tribal organizations as part of the tribal consultation and coordination process and one letter from the State of Hawaii, Office of Hawaiian Affairs. During the consultation and coordination period, EPA held two national tribal webinars and listening sessions on March 15 and March 17, 2021, which were attended by more than 130 participants. The webinars were held to discuss EPA's current consultation policies and practices, identify future actions the Agency is developing to improve on its existing consultation work, and seek input on opportunities to strengthen its consultation policies and practices moving forward.

Additionally, EPA staff briefed four EPA Tribal Partnership Groups and Regional Tribal Operations Committees (RTOCs) during the consultation and coordination period, at the groups' request, recording feedback provided by tribal representatives at those meetings.

When developing this *Plan for Implementing the Policies and Directives of Executive Order* 13175, EPA reviewed and carefully considered all comments and input provided during the consultation and coordination process. Based on key comment themes that emerged from the tribal input received, EPA is taking action to strengthen our consultation policies and practices and the implementation of those policies and practices, as discussed below.

II. Actions to Strengthen EPA Consultation Policies and Practices

EPA has a number of policies and practices currently in place to implement EO 13175 and provide for regular, meaningful consultation for Agency actions that may affect tribes. These policies and practices are discussed in detail below in Section IV of this plan. EPA recognizes that consultations are often complicated processes, and the Agency strives to learn from its past consultations and ongoing engagements with tribes as it continues work to strengthen its consultation practices. Building from the Agency's current policies and practices and based on the feedback that EPA received during the consultation and coordination process, the Agency will:

1) Convene an Agency workgroup to identify options and recommendations to address key comments raised by tribes during the consultation and coordination process. This Agency workgroup will be convened and managed by EPA's American Indian Environmental Office and be comprised of headquarters and Regional office EPA Tribal Consultation Advisors. EPA will continue to conduct outreach to and engage tribes as it works to review and respond to the consultation input it received.

The workgroup will focus on addressing several key comment themes heard from tribes in the consultation, including concerns that:

- In general, EPA does not provide a sufficient amount of time for tribes to meaningfully and effectively consult on Agency actions or adequate time to receive consultation notification prior to the start of consultation meetings and/or listening sessions.
- EPA's definition of consultation should be broadened, and additional requirements should be put in place to ensure policies, rules, and decisions fully consider and address the concerns of tribal nations.
- Consultation often can feel like a "check the box" exercise, with a decision already made by the time consultation occurs, and/or consultations can feel like an early comment period opportunity and not a consultation opportunity.
- Better coordination and communication are needed among multi-agency consultation actions with improved tribal involvement.
- Comprehensive training on tribal governments and their unique status (as distinct from the status of states and local governments), the nation-to-nation relationship, federal trust and treaty obligations, and appropriate consultation protocols is needed for EPA staff and both senior and career leadership.
- Improvements can be made to EPA's <u>Tribal Consultation Opportunities</u>

<u>Tracking System (TCOTS) website</u> and email listsery to enhance Agency outreach on consultation opportunities.

- EPA decisionmakers do not consistently participate in consultation meetings.
- EPA needs to strengthen its follow-up procedures with tribes after consultation.

<u>Priority Action</u>: EPA reinforces that it is critical to have appropriate senior leadership involved in tribal consultation meetings. A focus area of EPA's workgroup will be to recommend uniform criteria and practices across the Agency for identifying appropriate senior EPA officials to attend tribal consultation meetings. This addresses a key comment expressed by a number of tribes.

2) Provide enhanced consultation training for EPA Tribal Consultation Advisors. All new EPA personnel receive a mandatory training entitled *Working Effectively with Tribal Governments*. To supplement this training, EPA will develop and provide enhanced training for Tribal Consultation Advisors to ensure they have the training and support that they need to effectively implement the Agency's consultation policies and practices. This training will allow Tribal Consultation Advisors to receive regular updates and an opportunity to discuss best practices and lessons learned regarding the consultation and coordination process. The training will be led by EPA's American Indian Environmental Office.

I. Current Consultation Policies and Practices

EPA has a long history of engagement with tribal governments and is committed to respecting tribal sovereignty and the nation-to-nation relationship in the consultation process. In 1984, EPA was one of the first federal agencies to establish its own Indian Policy specifying how it would interact with tribal governments and consider tribal interests in carrying out its programs to protect human health and the environment. The *EPA Policy for the Administration of Environmental Programs on Indian Reservations* (1984 Indian Policy) identifies nine basic principles for implementing EPA's programs where they impact Indian reservations and tribal interests. These principles include that EPA will work directly with tribal governments on a "government-to-government" basis; that it will recognize tribal governments as the primary parties for setting standards, making environmental policy decisions, and managing programs for reservations, consistent with EPA standards and regulations; and in keeping with the federal trust responsibility, will ensure that tribal concerns and interests are considered whenever EPA's actions and/or decisions may affect tribes.

As described in this section, EPA's current consultation practices set forth in the EPA <u>Policy on Consultation and Coordination with Indian Tribes</u> (Consultation Policy) establish the process for the Agency to identify actions or decisions appropriate for consultation, notify appropriate tribes of the possibility to consult with EPA, and describe how the Agency will receive and respond to consultation and coordination input. Among other actions, EPA has established a system (i.e., Tribal Consultation Opportunities Tracking System) to allow for nationwide notification of consultation opportunities and has created internal reporting measures to ensure that the Agency considers tribal input and emphasizes the importance of tribal consultation. As described in the previous section, EPA will take action to review,

improve, and/or modify the implementation of our consultation and coordination practices considering the extensive feedback received during the March 1 - 31, 2021 consultation.

EPA's Policy on Consultation and Coordination with Indian Tribes

In response to the 2009 presidential memo requiring agencies to submit plans to implement EO 13175, in May 2011, EPA was among the first federal agencies to issue a tribal consultation policy. The EPA Consultation Policy established national guidelines and institutional controls for consultation across EPA. It was finalized after extensive consultation and coordination with tribes and a public comment period. The goal of the Consultation Policy was to fully implement EO 13175 as well as EPA's 1984 Indian Policy.

The Consultation Policy is designed to fulfill the Agency's obligation to consult with tribes in accordance with EO 13175, but importantly establishes a broader standard regarding the type of Agency actions and activities that may warrant consultation. The Consultation Policy describes consultation as a process of meaningful communication and coordination between EPA and tribal officials that begins prior to EPA taking actions or implementing decisions that "may affect tribes." This broader standard is drawn from EPA's 1984 Indian Policy, which states that "tribal concerns and interests are considered whenever EPA's actions and/or decisions may affect" tribes. In addition to EPA's Consultation Policy, some of EPA regional and headquarters offices have developed additional procedures to tailor and assist in implementation of the EPA Policy on Consultation and Coordination with Indian Tribes.

Four-Phase Consultation Process: The Consultation Policy outlines a four-phase consultation process, that includes: identification, notification, input, and follow up.

- Identification: During this phase, EPA identifies activities that may be appropriate for consultation. To help identify, plan for, and coordinate EPA consultation actions across the Agency, OITA's American Indian Environmental Office (AIEO) conducts an internal semi- annual planning process whereby EPA headquarters and regional offices are asked to review planned activities to determine whether consultation may be appropriate and to report this information to AIEO. This semi-annual reporting process is conducted to help maximize coordination of consultation planning and execution among offices, affording additional lead time for preparation and planning. Additionally, as outlined in EPA's Consultation Policy, in addition to EPA's ability to determine what requires consultation, tribal officials have the ability to request to consult on Agency actions.
- Notification: During this phase, EPA notifies tribe(s) of activities that may be appropriate for consultation. Per the 2011 Consultation Policy, notification should occur sufficiently early in the process to allow for meaningful input by the tribe(s) and can occur in a number of ways depending on the nature of the activity and the number of tribes potentially affected. EPA notifies tribes of consultations through several methods. EPA programs send official consultation notification letters to the leadership of tribal governments that may be affected by a given action using the contact information maintained in the Bureau of Indian Affair's Tribal Leaders Directory, 171 which a number of headquarters and regional offices verify and

¹⁷ Bureau of Indian Affair's Tribal Leaders Directory (https://www.bia.gov/tribal-leaders-directory).

supplement using information that they independently collect. Additionally, EPA maintains a Tribal Consultation Opportunities Tracking System (TCOTS) website, which provides public access to current EPA consultation opportunities, with the information needed for tribes to actively engage EPA on those actions. In addition to accessing the TCOTS site directly, tribal representatives can sign up to receive email updates every time the Agency announces a consultation opportunity. Additionally, to assist the Agency in communicating with tribal environmental programs, EPA maintains email lists for tribal environmental and natural resource directors to assist EPA programs when communicating tribal consultation and engagement information, and also distributes consultation information to relevant EPA Tribal Partnership Groups and Regional Tribal Operations Committees, as appropriate.

- Input: During this phase, tribes provide input to EPA on the consultation matter. While tribes always have the option and are encouraged to submit written comments during the consultation and coordination process, as outlined in the 2011 Consultation Policy, this phase may include "a range of interactions including written and oral communications including exchanges of information, phone calls, meetings, and other appropriate interactions depending upon the specific circumstances involved. EPA coordinates with tribal officials during this phase to be responsive to their needs for information and to provide opportunities to provide, receive, and discuss input."
- Follow-up: During this phase, EPA provides feedback to the tribes(s) involved in the consultation to explain how their input was considered in the final action. As indicated in the 2011 Consultation Policy, "this feedback should be a formal, written communication from a senior EPA official involved to the most senior tribal official involved in the consultation." To help ensure that EPA is appropriately following up with tribes on consultation actions and is tracking this information, beginning in FY 2020, AIEO began requiring headquarters and regional offices to document consultation outcomes in order to administratively close out consultation records in TCOTS. The information being tracked includes: (1) confirmation of tribal participation; (2) confirmation of whether a tribe(s) submitted written input, and (3) a summary of how EPA addressed tribal input. Since FY 2020, the Agency has had monthly internal reporting metrics to track this follow-up phase of tribal consultation and help ensure that headquarters and regional offices are documenting these consultation outcomes in TCOTS.

Designated Consultation Roles & Responsibilities: To effectively implement EPA's consultation policies and practices, the 2011 Consultation Policy designates consultation roles and responsibilities for managers and staff across the Agency. Pursuant to EO 13175, EPA's Consultation Policy designates the EPA Assistant Administrator (AA) for the Office of International and Tribal Affairs (OITA) as EPA's Designated Consultation Official. EPA's Designated Consultation Official is responsible for coordinating and implementing tribal consultation across EPA and certifying compliance with EO 13175 for applicable EPA activities, as discussed below. Additionally, per the 2021 presidential memorandum, the Designated Consultation Official will coordinate implementation of

this plan for the Agency and, per the 2009 and 2021 presidential memoranda, has and will continue to report annually to the Office of Management and Budget (OMB) on the implementation of EO 13175.

EPA's Consultation Policy also designates key senior EPA management and staff to oversee and help implement the Consultation Policy. The policy designates EPA Assistant Administrators and Regional Administrators to oversee the consultation process in their respective headquarters and regional offices. Additionally, the Consultation Policy designates Tribal Consultation Advisors in each headquarters and regional office to assist EPA programs in identifying matters appropriate for consultation and serve as points-of-contact for EPA senior leadership and staff, tribal governments, and other parties interested in the consultation process.

Tracking, Management, and Reporting of Consultation Actions

To help ensure consistent identification, tracking, and management of EPA consultation actions, EPA follows a number of internal systems and protocols, as described below.

Tribal Consultation Opportunities Tracking System & TCOTS-DASH: The Agency uses its Tribal Consultation Opportunities Tracking System (TCOTS) website to track and manage current and past EPA consultation opportunities. To help improve tracking and management of EPA consultation efforts and to better communicate consultation information to senior leadership, AIEO also has developed a new, internal tool called TCOTS-DASH. Using information entered by headquarters and regional offices into TCOTS, TCOTS-DASH will provide real-time data to EPA leadership and staff on open tribal consultation opportunities as well as long-term consultation trends over time.

Annual Reporting to OMB: Pursuant to the 2009 presidential memorandum, EPA submits annual progress reports to OMB on the status of the consultation process and actions and identifies any updates to EPA's Consultation Policy and its implementation. EPA will continue to provide such annual reporting to OMB, as directed by the 2021 presidential memorandum.

Consultation Documentation and Certification for EPA Regulatory Actions

Pursuant to EO 13175, if a regulatory action will have a "substantial direct[] effect on one or more tribes," which is a narrower threshold than "may affect tribal interests" as applied under EPA's Consultation Policy, each federal agency must certify to OMB that appropriate consultation with tribes was conducted on the action in question and document a "tribal summary impact statement" in its preamble to the rule (EO 13175, Sections 5(b)(2)(B) & 5(c)(2)). To comply with this directive, when EPA submits a draft final regulation to OMB for review under EO 12866, the Agency includes a "tribal summary impact statement" as part of the preamble to a rule. Additionally, under EO 13175, if an Agency action or decision is determined to have "tribal implications," EPA is required to certify that the requirements of EO 13175 "have been met in a meaningful and timely manner" when transmitting the draft of the final regulation to OMB for review (EO 13175, Section 7(a)). Prior to submitting relevant final

actions to OMB for review, EPA programs must obtain a memo from EPA's Designated Consultation Office certifying compliance with EO 13175 consultation requirements.

EPA's Tribal Treaty Rights Guidance

As a supplement to EPA's Consultation Policy, in February 2016, EPA issued its <u>Policy on Consultation and Coordination with Indian Tribes: Guidance for Discussing Tribal Treaty Rights</u>. EPA developed this guidance after nationwide tribal consultation. The guidance complements EPA's Consultation Policy by providing affirmative steps for the Agency to take during tribal consultations when an EPA action occurs in a specific geographic location and a resource-based treaty right, or an environmental condition necessary to support the resource, may be affected by EPA's action. Pursuant to the guidance, in such instances, EPA will seek information and recommendations on tribal treaty rights and consider all relevant information obtained to help ensure that EPA's actions do not conflict with treaty rights, and to help ensure that EPA is fully informed when it seeks to implement its programs and to further protect treaty rights and resources when it has discretion to do so.

EPA continuously strives to incorporating tribal treaty rights into their work. For example, EPA's Office of Superfund Remediation and Technology Innovation issued a memo on the *Consideration of Tribal Treaty Rights and Traditional Ecological Knowledge in the Superfund Remedial Program* in January 2017.

Conclusion

EPA would like to acknowledge the early commitment of the Biden Administration to regular, meaningful, and robust consultation with tribal nations and to seeking information from federal agencies on the steps they are taking to implement the policies and directives of EO 13175, developed in consultation with tribal nations. EPA remains committed to consulting with tribes and to holding meaningful communication and coordination between EPA and tribal officials prior to EPA taking actions or implementing decisions that may affect tribes. EPA looks forward to this opportunity to share its *Plan for Implementing the Policies and Directives of Executive Order 13175* with OMB and to work as an Agency to respond to and address tribal input to improve EPA's implementation of its consultation policies and practices, pursuant to the policies and directives of EO 13175. EPA is dedicated to strengthening our consultation policies and procedures.

062S. 2276 – Good Accounting Obligation in Government Act Public Law No: 115-414, January 3, 2019

In accordance with the reporting requirements of the Good Accounting Obligation in Government Act, Agencies are to submit reports on outstanding recommendations in the annual budget submitted to Congress.

For the FY 2023 budget justification, EPA developed a report listing each open public recommendation for corrective action from the Office of the Inspector General, along with the implementation status of each recommendation.

EPA also developed a report listing the status of each open or closed as unimplemented public recommendation from the Government Accountability Office (GAO).

EPA OIG Open Recommendations and Corrective Actions

FY Audit Number	Recommendations and Corrective Actions	Report Date
10-P00224-168	Recommendation: Develop a systematic approach to identify which States have outdated or inconsistent MOAs, renegotiate and update those MOAs using the MOA template, and secure the active involvement and final, documented concurrence of Headquarters to ensure national consistency. Corrective Action: EPA has completed the review of all the EPA-State MOAs. Ten authorized NPDES states were identified as being problematic. EPA Regions and States have completed actions to update MOAs to satisfy concerns identified in the corrective action plan for three states: Iowa, Missouri, and Virginia. At this time, seven MOAs are still in the process of being corrected. Planned: 9/30/22	9/14/10
14-P00109-360	Recommendation: Direct COs to require that the contractor adjust all its billings to reflect the application of the correct rate to team subcontract ODCs. Corrective Action: Region 6 concurs with Recommendation No. 3 and agrees to require the contractor to adjust all of its past billings to reflect the application of the composite rate to team-subcontractor ODCs that were arranged for and paid for by the team-subcontractor. We intend to implement the corrective action when final indirect cost rates (OCR) are established. Therefore, the CO will be directed to defer past billing adjustments until the Defense Contract Audit Agency (DCAA) audits the indirect cost rates and the EPA Financial Administrative Contracting Officer (FACO) negotiates, approves, and issues a Final Indirect Cost (ICR) Agreement for the past billing periods (i.e., Years 2007 to 2013). Planned: 9/30/24	2/4/14
16-P00275-140	Recommendation: We recommend that the Assistant Administrator for Air and Radiation: Determine whether additional action is needed to mitigate any adverse air quality impacts of the Renewable Fuel Standard as required by the Energy Independence and Security Act. Corrective Action: OAR agrees with this recommendation, and we acknowledge the statute's requirement to determine whether additional action is needed to mitigate any adverse air quality impacts considering the anti-backsliding study. That study, discussed in Corrective Action 2, would need to be completed prior to any such determination taking place. Planned: 9/30/24 Recommendation: We recommend that the Assistant Administrator for Air and Radiation: Complete the anti-backsliding study on the air quality impacts of the Renewable Fuel Standard as required by the Energy Independence and Security Act.	8/18/16

FY Audit Number	Recommendations and Corrective Actions	Report Date
	Corrective Action: OAR agrees with this recommendation, and we acknowledge the statutory obligation for an anti-backsliding study under Clean Air Act section 211(v) (as amended by EISA section 209). EPA has already taken several time-consuming and resource-intensive steps that are important prerequisites for the anti-backsliding study. For example, OAR conducted a vehicle emissions test program designed to evaluate the impacts of gasoline properties (including aromatics and ethanol concentration) on vehicle exhaust emissions, https://www3.epa.gov/otaq/models/moves/epact.htm. This study is the largest, most comprehensive, and most carefully designed and implemented study to date on the impacts of fuel changes on emissions from recent model year gasoline vehicles. Using the data from this study, OAR then updated the fuel effects model in its tool for estimating motor vehicle emissions, the Motor Vehicle Emissions Simulator (MOVES). This update was released in 2014. However, as the OIG report correctly notes, there are multiple intermediate research steps that still need to be completed before OAR can plan, fund, and conduct a comprehensive anti-backsliding study. These steps include development of baseline, current, and projected scenarios for how renewable fuels have and might be produced, distributed, and used to fulfill the RFS requirements, generation of emissions inventories, and air quality modeling, all of which are time-consuming and resource intensive. Furthermore, this work must be conducted on top of other statutorily required actions under the RFS program, many of which are carried out by the same group of staff and managers. Planned: 9/30/24	
17-P00053-164	Recommendation: Conduct an assessment of clearance devices to validate their effectiveness in detecting required clearance levels, as part of the Office of Pesticide Programs' ongoing re-evaluation of structural fumigants. Corrective Action: Within two years of the final report, by November 30, 2018, OCSPP will validate and implement new device clearance guidance. Planned: 12/31/22	12/12/16
18-P00059-167	Recommendation: Develop standard operating procedures that outline the Office of Land and Emergency Management and Office of Enforcement and Compliance Assurance roles and responsibilities for overseeing the validity of Resource Conservation and Recovery Act and Superfund financial assurance instruments. Corrective Action 5: EPA will, for the RCRA program, inventory and assess existing guidance and/or SOPs, outline OLEM and OECA roles and responsibilities for overseeing the validity of RCRA financial assurance instruments, communicate existing guidance and/or SOPs to financial assurance community, and develop or update SOPs and provide to financial assurance community. August 2021 Update: ORCR is in the process of upgrading the financial assurance module (component) of the RCRAInfo system from its current Version 5 to the new RCRAInfo Version 6 and thus has more precise information about when the new financial assurance upgraded	12/22/17

FY Audit Number	Recommendations and Corrective Actions	Report Date
	module will be available. ORCR has completed much of the workgroup process for development of the RCRAInfo module. Additional needed steps include coding and building the module, testing, and deployment. These steps take several weeks to months to complete. OLEM is proposing to complete Corrective Actions (5), (6), (7), and (8) by the end of FY 2022, to take full advantage of the new financial assurance data environment and incorporate that environment into its guidance and training under the corrective actions. These dates had previously been revised, and we are seeing considering this new more precise information that further revised dates would be more accurate. The OLEM Acting Assistant Administrator notified the OIG of the revised date via email dated August 20, 2021. The OIG acknowledged the revision via email on August 25, 2021. Planned: 6/30/22 Recommendation: Develop and include procedures for checking with other regions for facilities/sites with multiple self-insured liabilities in the standard operating procedures created for Recommendation 5. Corrective Action 6: Same as above. Planned: 6/30/22 Recommendation: Develop and include instructions on the steps to take when an invalid financial assurance instrument (expired, insufficient in dollar amount, or not provided) is identified in the standard operating procedures created for Recommendation 5 and collect information on the causes of invalid financial assurance. Corrective Action 7: Same as above. Planned: 6/30/22 Recommendation: Train staff on the procedures and instructions	
	developed for Recommendations 5 through 7. Corrective Action 8: Same as above. Planned: 9/30/22	
18-P00080-164	Recommendation 1: The Assistant Administrator for Chemical Safety and Pollution Prevention, in coordination with the Office of Enforcement and Compliance Assurance: 1. Develop and implement a methodology to evaluate the impact of the revised Agricultural Worker Protection Standard on pesticide exposure incidents among target populations. Corrective Action 1-1: CA 1 OCSPP will: (1) collect and review data related to the extent to which agricultural workers obtain knowledge through trainings; (2) collect and review incident data; and (3) after reviewing training and incident data, analyze the need to collect	2/15/18
	additional information to help evaluate the impact of the revised Worker Protection Standard. These efforts, as well as a detailed timeline for completion of specific milestones, are described in the Agency's 2/25/19 Response to the OIG"s Final Report. After reviewing training and incident data, OCSPP will consider the need to collect additional information to help evaluate the impact of the revised Worker Protection Standard. EPA will examine the potential for additional sources of information that might contribute to a better understanding of the rule's impact by December 2022. Target Completion Date: OCSPP will complete a Final Report on the three efforts described below by December 31, 2022. Planned: 12/31/22	

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18-P00233-360-	Recommendation: We recommend that the EPA Regional	8/22/18
390	Administrators, Regions 6 and 9: Fully develop and implement	
	prioritization and resource allocation methodologies for the Tronox	
	abandoned uranium mine sites on or near Navajo Nation lands.	
	Corrective Action: Complete development and implementation of	
	resource allocation methodology following the cost analysis of the	
	preferred remedies.	
	COMPLETED - Complete prioritization list for funding by December	
	31, 2021.	
	COMPLETED - Establish a funding allocation strategy for the	
	prioritized NAUM sites by December 31, 2021.	
	Complete final resource allocations by May 31, 2022. Planned: 5/31/22	
18-P00240-1	Recommendation: Establish a strategic vision and objectives for	9/5/18
	managing the use of citizen science that identifies:	
	a. Linkage to the agency's strategic goals,	
	b. Roles and responsibilities for implementation, and	
	c. Resources to maintain and build upon existing agency expertise	
	Corrective Action: The agency concurs with this recommendation and	
	will establish an agencywide work group to establish a more formal	
	strategic vision and objectives for managing the use of citizen science,	
	including policies, procedures and clear objectives for how to collect,	
	manage and use citizen science to support the agency's mission.	
	Planned: 9/30/22	
	Recommendation: Through appropriate EPA offices, direct completion	
	of an assessment to identify the data management requirements for	
	using citizen science data and an action plan for addressing those	
	requirements, including those on sharing and using data, data	
	format/standards, and data testing/validation.	
	Corrective Action: The agency concurs with this recommendation and	
	will complete an assessment and action plan to identify and address	
	data management requirements for citizen science.	
	Planned: 3/31/22	
18-P00240-166	Recommendation: Build capacity for managing the use of citizen	9/15/18
	science, and expand awareness of citizen science resources, by:	
	a. Finalizing the checklist on administrative and legal factors for agency	
	staff to consider when developing citizen science projects, as well as	
	identifying and developing any procedures needed to ensure	
	compliance with steps in the checklist;	
	b. Conducting training and/or marketing on EPA's citizen science	
	intranet site for program and regional staff in developing projects; and	
	c. Finalizing and distributing materials highlighting project successes	
	and how EPA has used results of its investment in citizen science.	
	Corrective Action: ORD will consult with OGC and other relevant EPA	
	programs and regions to finalize the checklist on administrative and	
	legal factors for agency staff to consider when developing citizen	
	science projects. ORD will conduct training and marketing for program	
	and regional staff. Finally, ORD will have an active communication and	
	outreach strategy that will include communications materials	

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	highlighting project successes and how EPA has used results of its investment in citizen science. Planned: 11/21/22	
19-P00002-168	Recommendation: Complete development of the probabilistic risk assessment tool and screening tool for biosolids land application scenarios. Corrective Action #3: For Recommendation 3, the agency agreed with	11/15/18
	the recommendation and offered an acceptable corrective action but did not provide a specific completion date. After our meeting on September 17, 2018, the Office of Water provided an acceptable completion date. This recommendation is resolved with corrective actions pending. Planned: 3/31/23	
	Recommendation: Develop and implement a plan to obtain the additional data needed to complete risk assessments and finalize safety determinations on the 352 identified pollutants in biosolids and promulgate regulations as needed.	
	Corrective Action #4: For Recommendation 4, EPA agreed with this recommendation. The initial corrective action did not fully address the intent of the recommendation. After our meeting on September 17, 2018, EPA provided acceptable corrective actions and a planned completion date. In addition to EPA's work on improving the biennial	
	review process, the Office of Water established a performance measure for biennial reviews. This recommendation is resolved with corrective actions pending. Planned: 12/31/22	
	Recommendation: Publish guidance on the methods for the biosolids pathogen alternatives 3 and 4. Corrective Action #6: OW completed its work to address the corrective	
	action on 12-16.20. The corrective actions will be published in an ORD document that is currently under review. The document will not meet the deadline for posting to the website by 12/30/2020. OST anticipates the updates will be publicly available by 5/31/2021. Planned: 7/1/22	
	Recommendation: Issue updated and consistent guidance on biosolids fecal coliform sampling practices.	
	Corrective Action #8: OW completed its work to address the corrective action on 12-16.20. The corrective actions will be published in an ORD document that is currently under review. The document will not meet the deadline for posting to the website by 12/30/2020. OST anticipates the updates will be publicly available by 5/31/2021.	
19-P00168-140	Planned: 7/1/22 Recommendation: Address the following risks as part of the on-road	6/3/19
	heavy-duty vehicle and engine compliance program risk assessment, in addition to other risks that EPA identifies: a. non-criteria pollutants not being measured.	
	b. Level of heavy-duty sector testing throughout the compliance life cycle.c. Marketplace ambiguity over regulatory treatment of rebuilt versus remanufactured engines.	

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	d. Different compliance challenges for heavy-duty compression-	
	ignition and spark-ignition engines.	
	e. Lack of laboratory test cell and in-house testing capacity for heavy-	
	duty spark-ignition engines.	
	Corrective Action: OAR agrees with this recommendation and will address each of these areas:	
	Non-criteria pollutants not being measured	
	Response: Under the Clean Air Act, manufacturers are responsible for	
	measuring and reporting emissions of nonregulated pollutants. OTAQ	
	does not routinely measure noncriteria pollutants, but we will work to	
	enhance manufacturer reporting by establishing a new document type in	
	our Engine and Vehicle Compliance Information System (EV-CIS) to	
	collect the manufacturer reports; updating our guidance to announce the	
	new EV-CIS capacity and to remind manufacturers of their reporting obligation; and then reviewing and considering the reported information	
	as part of our ongoing risk assessment process. Planned Completion	
	Date: End of Q4 2021.	
	• Level of heavy-duty sector testing throughout the compliance life	
	cycle	
	Response: OTAQ will continue to prioritize testing for all vehicle and	
	engine sectors, including the HD highway sector, as resources allow.	
	We will formally document and periodically reassess the level of	
	testing as part of our periodic risk assessment. Planned Completion	
	Date: End of Q3 2021.	
	Marketplace ambiguity over regulatory treatment of rebuilt versus	
	remanufactured engines	
	Response: OTAQ believes the regulations are clear on this issue so we	
	will engage stakeholders to improve understanding of nomenclature and	
	expectations, and we will work to educate manufacturers about	
	ambiguity resulting from their inappropriate use of terminology. Planned Completion Date: 9/30/22	
	Different compliance challenges for heavy-duty compressionignition and spark-ignition engines	
	Response: This recommendation concerns the technical differences	
	between SI and CI engines, and the resulting different challenges and	
	tradeoffs in controlling emissions for the two types of technology. We	
	will formally document and periodically reassess concerns about	
	different compliance incentives as part of our periodic risk assessment.	
	Planned Completion Date: 9/30/22	
	• Lack of laboratory test cell and in-house testing capacity for heavy-	
	duty spark-ignition engines	
	Response: Heavy-duty spark-ignition (HDSI) engines represent less	
	than 4% of heavy-duty highway production. NVFEL is able to test all	
	the other sectors and can use contract laboratories or portable emissions	
	measurement systems to test HDSI engines if necessary. Therefore,	
	investment in HDSI testing capacity has not been a priority to date.	
	Going forward, we will formally document and periodically reassess decisions about investments in laboratory capacity as part of a periodic	
	decisions about investments in faboratory capacity as part of a periodic	

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	risk assessment. Planned Completion Date: 9/30/22. Planned	
	Completion Date: End of Q3 2021. Planned: 9/30/22	
	Recommendation: Evaluate the following issues, which may require	
	regulatory or programmatic action, as part of (1) the on-road heavy-	
	duty vehicle and engine emission control program risk assessment and (2) EPA's annual regulatory agenda development process:	
	a. Regulatory definition of on-road heavy-duty engine useful life may	
	not reflect actual useful life.	
	b. Not-to-Exceed standard may not reflect real-world operating	
	conditions, especially for certain applications.	
	c. In-use testing requirements for heavy-duty spark-ignition engines	
	may be needed.	
	d. A particle number standard may more accurately control particulate	
	matter emissions that impact human health.	
	Corrective Action: OAR agrees with this recommendation. We will	
	consider the first three issues as part of the CTI rulemaking process. We	
	also will commit to considering approaches to best control particulate	
	matter emissions that affect public health and will continue to work	
	toward improving ultrafine particulate matter measurement techniques.	
	Planned: 9/30/22	
19-P00195-164	Recommendation: Complete the actions and milestones identified in the	6/219/19
	Office of Pesticide Programs' PRIA Maintenance Fee Risk Assessment	
	document and associated plan regarding the fee payment and refund	
	posting processes.	
	Corrective Action: OCSPP/OPP will complete the actions and	
	milestones identified in the Office of Pesticide Programs' PRIA	
	Maintenance Fee Risk Assessment document and associated plan	
	regarding the fee payment and refund posting processes by 12/31/2020.	
19-P00207-140	Planned: 12/31/22 Recommendation: Develop and implement electronic checks in EDA's	6/27/19
19-200207-140	Recommendation: Develop and implement electronic checks in EPA's	0/2//19
	Emissions Collection and Monitoring Plan System or through an alternative mechanism to retroactively evaluate emissions and quality	
	assurance data in instances where monitoring plan changes are	
	submitted after the emissions and quality assurance data have already	
	been accepted by EPA.	
	Corrective Action: The Office of Air and Radiation agrees with this	
	recommendation. As OIG acknowledged in its report, CAMD has	
	already addressed this issue by implementing a post-submission data	
	check that is run at the end of each reporting period. The new check	
	identifies any monitoring plan submissions containing changes to	
	monitoring span records that occur prior to the current emissions	
	reporting period. If any changes were made, the check recalculates	
	quality assurance tests that were submitted prior to the span change and	
	verifies the pass/fail status of each test. If the status of any test changes,	
	CAMD analysts will contact the affected facility and request the	
	correction and resubmission of the impacted data. As of February 2019,	
	CAMD had insured that the discrepancies in the data used in OIG's	
	review were resolved and resubmitted.	

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	In the long term, CAMD will implement an additional check in the ECMPS forcing retroactive span record changes to require the reevaluation and resubmission of any affected quality assurance tests and hourly emissions records. CAMD has initiated the process of reengineering ECMPS. In order to minimize additional expenditures on the current version of ECMPS, CAMD will focus on adding the check to the new version of ECMPS. Planned: 3/31/25	
19-P00251-140	Recommendation: Assess the training needs of EPA regions and state, local and tribal agencies concerning stack test plans and report reviews and EPA test methods and develop and publish a plan to address any training shortfalls. Corrective Action: OAR will implement the following corrective action. OAR's Office of Air Quality Planning and Standards (OAQPS) will work with the EPA regions and state, local and tribal air agencies to review currently available materials and assess training needs with respect to approval of stack test plans, review of stack test reports, and conduct of EPA test methods, with respect to particulate matter compliance testing. OAQPS will work with EPA regional, state, local and tribal agencies to identify current training shortfalls and develop a plan to address these shortfalls. We anticipate two and one-half years to assess the training needs, prepare a training plan, and begin enacting the plan. Planned: 3/31/22	
19-P-00251-180	Recommendation: Develop and implement a plan for improving the consistency of stack test reviews across EPA regions and delegated agencies. Corrective Action: OECA will implement a plan, in coordination with OAR and consistent with the activities undertaken by OAR in addressing recommendations 2-3, for improving the consistency of stack test reviews across EPA regions and delegated agencies. Such enhanced compliance monitoring will help ensure the tool of stack testing is being sufficiently and properly utilized. Planned: 3/31/22	7/30/19
19-P-00251-410	Recommendation: Develop and implement a plan for improving the consistency of stack test reviews across EPA regions and delegated agencies. Corrective Action: Region 10 agreed to conduct annual meetings with its state and local agencies to discuss their stack testing oversight activities. Region 10 committed to completing the first round of meetings with its state and local agencies by March 31, 2020 and committed to continuing those meetings through March 31, 2022. After OECA and the OAR have completed the corrective actions for Recommendations 1 and 3, Region 10 will meet with its state and local agencies to discuss and implement any new stack test oversight policies and guidance. Planned: 5/31/22 Recommendation: Develop and implement controls to assess delegated agencies' stack testing oversight activities. Corrective Action: R10 will implement controls to assess delegated agencies stack testing oversight activities, after OECA & OAR actions	7/30/19

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	are completed. R10 revised its completion date for this corrective action to December 31, 2022, due to State (delegated agencies) unavailability, as there are performing testing activities during the Spring. Planned: 12/31/22	
	Recommendation: Develop a communication plan to make all state and local agencies within Region 10 aware of EPA requirements and guidance for conducting stack testing oversight.	
	Corrective Action: Region 10 will communicate information from OECA and OAR as it become available. Planned: 5/31/22	
19-P00318-168	Recommendation: Update and revise the 2010 Public Notification Handbooks to include: a. Public notice delivery methods that are consistent with regulations. b. Information on modern methods for delivery of public notice. c. Public notice requirements for the latest drinking water regulations. d. Procedures for public water systems to achieve compliance after violating a public notice regulation. e. Up-to-date references to compliance assistance tools. f. Additional resources for providing public notice in languages other	9/25/19
	than English. Corrective Action: EPA will revise the Public Notification Handbook. Planned: 9/30/20 Recommendation: Update and revise the 2010 Revised State Implementation Guidance for the Public Notification Rule to include: a. Public notice delivery methods that are consistent with regulations. b. Information on modern methods for delivery of public notice. Corrective Action: EPA will revise the State Implementation Guidance per OIG's recommendation. Planned: 9/30/22	
20-P00012-180	Recommendation: Require circuit riders to include the pesticide needs and risks of each tribe on their circuit in the development of their priority-setting plans, which are a required component of tribal pesticide enforcement cooperative agreements. Corrective Action: OECA agrees to develop guidance which will require circuit riders to include the needs and risks of each tribe on their circuit in the development of priority-setting plans, which are required component of tribal pesticide enforcement cooperative agreements. (FINAL GUIDANCE). Planned: 12/31/22 Recommendation: Develop and implement tribal circuit rider guidance for pesticide inspectors that includes expectation-setting and	10/29/19
	communication with tribes that are being served under a tribal pesticide enforcement cooperative agreement. Corrective Action: OECA agrees to develop guidance which will require circuit riders to include the needs and risks of each tribe on their circuit in the development of priority-setting plans, which are required component of tribal pesticide enforcement cooperative agreements. (FINAL GUIDANCE). Planned: 12/31/22 Recommendation: Develop and implement regional processes to receive feedback directly from tribes using pesticide circuit riders.	

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	Corrective Action: OECA agrees to develop guidance which will	
	require circuit riders to include the needs and risks of each tribe on their	
	circuit in the development of priority-setting plans, which are required	
	component of tribal pesticide enforcement cooperative agreements.	
	(FINAL GUIDANCE). Planned: 12/31/22	
20-F00033-130	Recommendation: We recommend that the Chief Financial Officer	11/19/19
	establish accounting models to properly classify and record interest, fines, penalties and fees.	
	Corrective Action: 3.0 - The OCFO will work with the Office of Land	
	and Emergency Management to review the business process for e-	
	Manifest financial activities and develop a plan for recording the related	
	activities at the transactional level. Planned: 3/31/22	
	Recommendation: We recommend that the Chief Financial Officer	
	establish accounting models to properly record e-Manifest account	
	receivables and recognize earned revenue at the transaction level.	
	Corrective Action: 4.0 - The OCFO will work with the Office of Land	
	and Emergency Management to review the business process for e-	
	Manifest financial activities and develop a plan for recording the related	
	activities at the transactional level. Planned: 3/31/22	
	Recommendation: We recommend that the Chief Financial Officer	
	establish accounting models to properly record receivables, collections	
	and earned revenue from federal versus nonfederal vendors.	
	Corrective Action: 5.0 - The OCFO will work with the Office of Land	
	and Emergency Management to review the business process for e-	
	Manifest financial activities and develop a plan for recording the related	
	activities at the transactional level. Planned: 3/31/22	
	Recommendation: We recommend that the Chief Financial Officer	
	update the accounting models to properly record collections and not	
	reduce an account receivable account.	
	Corrective Action: 6.0 - The OCFO will work with the Office of Land	
	and Emergency Management to review the business process for e-	
	Manifest financial activities and develop a plan for recording the related	
	activities at the transactional level. Planned: 3/31/22	
20-P00065-451	Recommendation: Revise EPA Manual 3130 A2, Recognition Policy	12/30/19
	and Procedures Manual, to establish a methodology for determining	
	the equivalent value for time-off awards.	
	Corrective Action 1: The Agency will revise its awards manual to	
	incorporate guidance for determining an appropriate time-off award	
	amount based upon the employee's efforts and accomplishments related	
	to the award nomination. We agree with the Office of Mission	
	Support's estimated completion date of October 31, 2022, for the	
	awards manual update. Planned: 10/31/22	
	Recommendation: Establish internal control procedures to manage	
	time-off awards as part of EPA resource management.	
	Corrective Action 3: The Agency plans to review time-off award use as	
	part of its on-site human capital accountability reviews of program and	
	regional human resources operations. These reviews have been delayed	
	due to restrictions related to the coronavirus pandemic. We therefore	

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	agree with the Office of Mission Support's revised estimated completion date to review time-off award use by June 30, 2022. The Office of Mission Support instituted additional internal controls to	
	manage time-off award use: • Time-off awards expire one year after effective date.	
	 Time-off awards combined with high-dollar cash awards require a higher-level review by program management. Supervisors monitor time-off award balances using a leave earnings and balance dashboard, which was developed in January 2021 by EPA's payroll provider. Planned: 6/30/22 	
20-P00066-167	Recommendation: Maintain one official agencywide management and tracking system for homeland security and emergency response equipment that provides for the status, availability and acquisition costs of all equipment.	1/3/20
	Corrective Action: Establish AAMS as the agency wide system for tracking personal property. Planned: 6/30/22	
20-P00120-451	Recommendation: Develop and maintain an up-to-date inventory of the software and associated licenses used within the organization.	3/25/20
	Corrective Action: Establishing License Entitlement Inventory. The agency is developing and deploying an enterprise Software Asset and Configuration Management (SACM) capability that will align license entitlement data with software inventories to fully realize the goal of this recommendation. Planned:9/30/22	
20-P00146-140	Recommendation: Implement a system that is accessible to both EPA and the applicants to track the processing of all tribal-New-Source-Review permits and key permit dates including application received, application completed, draft permit issued, public comment period (if applicable), and final permit issuance. Corrective Action 1: OAR's Office of Air Quality Planning and Standards (OAQPS) has already begun work on the Electronic Permit System (EPS), which will include a module to receive and process applications for the EPA-issued tribal new source review permits. Specifically, this module will allow sources to submit electronic applications for tribal minor NSR permits and then allow EPA staff to process those applications in EPS. The system will allow EPA staff to update the status of the application and permit to reflect when the application is complete, the draft permit is issued, the beginning and ending of the public comment period, and the issuance of the final permit and response to public comments document. We anticipate having a workable version of the EPA-issued permit module ready in FY2021, Q2 and a finished product by the end of FY 2021. Planned: 3/31/22 Recommendation: Establish and implement an oversight process to verify that the regions update the permit tracking system on a periodic basis with the correct and required information. Corrective Action 2: Upon completion of the EPS, OAQPS will work with the Regional offices to establish an oversight process to ensure	4/22/20

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	Planned: 3/31/22	
	Recommendation: Develop and implement a strategy to improve the application process and permitting timeliness for tribal-New-Source-	
	Review permits, taking into consideration the findings and	
	recommendations from the Lean event. The strategy should include procedures to measure results.	
	Corrective Action 3: As discussed during the LEAN Kaizen event, OAQPS is currently working with the Regional offices on various actions to improve the application process and permitting timelines for all NSR permits, including tribal minor NSR permits. These actions include: (1) standardizing the permitting procedures and application forms used by the agency to streamline the permit application process, and (2) tracking the effectiveness of the implementation of this and other improvement actions identified at the LEAN event using permit	
	tracking flow boards and performance boards in every Region that issues NSR permits. In addition, we also will draft an education and communication strategy to reduce time-consuming back-and-forth activity between the permit applicants and EPA during the application process. Planned: 6/30/22	
	Recommendation: Provide guidance to the regions on how to accurately	
	determine and document the application completion date that should be used for tracking the permitting process and assessing timeliness.	
	Corrective Action 4: OAQPS will meet with the Regional offices that	
	issue NSR permits to determine how they are currently determining	
	completeness of NSR permit applications. Based on this input, OAQPS	
	will then work with the Regions to standardize criteria to be used for	
	determining permit application complete date and its application to	
	permitting actions. Furthermore, OAQPS will periodically evaluate if	
	the Regions are implementing the criteria consistently.Planned: 3/31/22	
	Recommendation: Develop and implement a plan, in consultation with the Office of Enforcement and Compliance Assurance and the EPA	
	regions, to periodically coordinate with tribes to identify facilities that	
	are operating in Indian Country without the required tribal-New-Source-Review permit.	
	Corrective Action 5: OAQPS will work with OECA, the Regional	
	offices and Tribes to develop a plan to identify facilities that may be	
	subject to this program. Planned: 9/30/22	
	Recommendation: Develop and implement a plan, in consultation with	
	the Office of Enforcement and Compliance Assurance and the EPA	
	regions, to periodically conduct outreach to industry groups to educate	
	them on the tribal-New-Source-Review permit requirements for	
	facilities that are constructed or modified in Indian Country.	
	Corrective Action 6: OAQPS will work with OECA, the Regional	
	offices and Tribes to develop a plan to inform industry groups located in Indian country about the tribal minor NSP permit requirements that	
	in Indian country about the tribal minor NSR permit requirements that might be applicable to them. Planned: 9/30/22	
20-P00173-1	Recommendation: Determine the extent and cause of the concerns related to culture and "tone at the top," based on the indicators from the	5/20/20

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	OIG's scientific integrity survey. Issue the results to all EPA staff and make available to the public, including planned actions to address the causes.	
	Corrective Action 1: We would first note that we cannot find the words "tone at the top" being surveyed and find its use in quotes in this recommendation unfortunate. EPA's Deputy Administrator, in cooperation with EPA's Science Advisor, will work with the Administrator to devise an action plan to address this recommendation.	
	EPA's Deputy Administrator, Science Advisor, Scientific Integrity Committee will analyze the OIG scientific integrity survey, together with previous surveys of EPA, EVS results, FMFIA reports and reports of alleged violations of EPA's Scientific Integrity Policy to inform this plan. Planned: 9/30/22	
20-P00173-166	Recommendation: In coordination with the assistant administrator for Mission Support, complete the development and implementation of the electronic clearance system for scientific products across the Agency. Corrective Action 6: OMS, ORD Office of Scientific Information Management (OSIM), and the Scientific Integrity Committee will coordinate to complete modification and Agency-wide implementation of ORD's Scientific & Technical Information Clearance System (STICS) to an agency-wide electronic clearance system for scientific products across the Agency. The system will be consistent with the Scientific Integrity Policy and our Best Practices document and with the Agency's Plan to Increase Access to the Results of EPA-Funded Scientific Research. Planned: 6/30/22 Recommendation: With the assistance of the Scientific Integrity Committee, finalize and release the procedures for addressing and resolving allegations of a violation of the Scientific Integrity Policy, and incorporate the procedures into scientific integrity outreach and training materials. Corrective Action 7.1: The Agency will release the Procedures document. It will be posted on the Agency's website (https://www.epa.gov/osa/procedure-for-allegations). Corrective Action 7.2: The ScI Program will create and release appropriate outreach materials to ensure EPA employees and their managers understand these procedures. Planned: 6/30/22 Recommendation: With the assistance of the Scientific Integrity Committee, develop and implement a process specifically to address and resolve allegations of Scientific Integrity Policy violations involving high-profile issues or senior officials, and specify when this process should be used. Corrective Action 8: EPA will amend the procedures document referenced in recommendation 7, to include a process to adjudicate allegations of Scientific Integrity Policy violations involving high-	5/20/20
	profile issues or senior officials in the Agency for which the Scientific Integrity Official or Scientific Integrity Committee does not feel it can adequately adjudicate via existing procedures and include an indicator for when the process should be used. Planned: 6/30/22	

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20-P00200-451	Recommendation: Develop and implement a strategic plan and objectives for the agencywide Quality System Corrective Action 1: Develop and implement a strategic plan and objectives for the agencywide Quality System. Planned: 12/31/21	6/22/20
20-P00236-360	Recommendation: Assist the State of Arkansas in developing and submitting a state plan to implement the 2016 municipal solid waste landfill Emission Guidelines. If Arkansas does not submit a state plan, implement the federal plan for the 2016 municipal solid waste landfill Emission Guidelines once the federal plan is effective. Corrective Action 3.3: Review and take action on Arkansas' submittal once received. Planned: 6/30/22 Corrective Action 3.4: If no state plan or federal plan delegation request is submitted, or until EPA approves Arkansas' submittal, implement the federal plan for the 2016 MSW landfills. Planned: 6/30/22	07/30/20
20-P00236-140	Recommendation: Develop and implement a process for the periodic review of municipal solid waste landfill design capacity information and Title V permit lists to identify municipal solid waste landfills with design capacities over the applicable threshold that have not applied for a Title V permit. Corrective Action 4.1: Anticipated for completion by 12/31/22. Planned: 12/31/22	07/30/20
20-P00245-451	Recommendation: We recommend that the assistant administrator for Mission Support evaluate EPA's Intergovernmental Personnel Act Policy and Procedures Manual (IPA), including the checklist, to determine whether the required documents, the consequences for noncompliance, the responsible offices, and the individual roles and responsibilities remain relevant and appropriate, and update the Manual accordingly. Corrective Action 1: The Office of Human Resources (OHR) will evaluate EPA's IPA policy manual, checklists, required documents, the consequences of noncompliance, responsible offices, and relevance of individual roles and responsibilities. OHR will enter a final draft in the Directives Clearance process. Planned: 4/15/22 Recommendation: We recommend that the assistant administrator for Mission Support strengthen controls throughout EPA's Intergovernmental Personnel Act assignment process to verify that required documents are properly submitted and maintained as required by EPA's Intergovernmental Personnel Act Policy and Procedures Manual (IPA) and that the consequence for nonsubmittal of required documents is enforced. Corrective Action 2: OHR will strengthen controls throughout the IPA assignment process to verify required documents are properly submitted and maintained, as stated in EPA's IPA policy manual, and the consequences for nonsubmittal of required documents are enforced. Planned:4//15/22 Recommendation: We recommend that the assistant administrator for Mission Support strengthen controls over the tracking of EPA employees on Intergovernmental Personnel Act assignments.	8/10/20

FY Audit Number	Recommendations and Corrective Actions	Report Date
	Corrective Action 3: OHR will strengthen controls over the tracking of	
	EPA employees on IPA assignments. Planned: 1/15/22	
20-E00332-167	Recommendation: Ensure that guidance and planning address	9/28/20
	deployment of on-scene coordinators in the event of large incidents	
	during pandemics, including overcoming travel restrictions to respond	
	to large incidents.	
	Corrective Action 3: OLEM plans, within 6 months of post-pandemic	
	return to normal operations, to conduct and issue an after-action report	
	to evaluate the effectiveness of EPA emergency response activities	
	during the pandemic which will include an evaluation of response	
20 F00222 1	readiness with respect to travel restrictions. Planned: 6/30/22	0/20/20
20-E00333-1	Recommendation: Develop and implement a plan to coordinate relevant	9/28/20
	Agency program, regional, and administrative offices with the External	
	Civil Rights Compliance Office to develop guidance on permitting and	
	cumulative impacts related to Title VI.	
	Corrective Action: Anticipated for completion by 9/30/22. Planned: 9/30/22	
20-E00333-162	Recommendation: Develop and implement a plan to complete	9/28/20
	systematic compliance reviews to determine full compliance with the	
	Title VI program.	
	Corrective Action 2: Anticipated for completion by 9/30/22. Planned:	
	9/30/22	
	Recommendation: Verify that EPA funding applicants address potential	
	noncompliance with Title VI with a written agreement before the funds	
	are awarded.	
	Corrective Action 4: ECRCO will revise the 4700 review process (civil rights form). Planned: 3/31/22	
	Recommendation: Determine how to use existing or new data to	
	identify and target funding recipients for proactive compliance reviews,	
	and develop or update policy, guidance, and standard operating	
	procedures for collecting and using those data.	
	Corrective Action 5: ECRCO will provide training to all staff in the 2nd	
	quarter on the 4700-4 revised process and will post technical assistance	
	video. With respect to other deliverables, ECRCO will conduct	
	training within 2 months of each deliverable. Planned: 3/31/22	
	Recommendation: Develop and deliver training for the deputy civil	
	rights officials and EPA regional staff that focuses on their respective	
	roles and responsibilities within EPA's Title VI program.	
	Corrective Action 6: OGC commits to developing and implementing	
	guidance on permitting and cumulative impacts related to Title VI. In	
	doing so, ECRCO will coordinate with the AO on the development and	
	implementation of its civil rights guidance and seek any appropriate AO	
	approval. Notably, ECRCO's efforts to strengthen civil rights	
	enforcement necessarily includes strengthening its relationship with	
21 E00022 451	EPA's program and regional offices. Planned: 3/31/22	12/7/20
21-E00033-451	Recommendation: Develop and implement procedures that include detailed requirements for planning and managing laboratory	12/7/20
	consolidation efforts. Requirements should address developing master	
	consolidation chorts. Requirements should address developing master	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	plans and programs of requirements, tracking and updating cost and	
	schedule estimates, and maintaining decisional documentation.	
	Corrective Action: We will continue to develop programs of	
	requirements documents per the requirements listed in EPA's National	
	Facilities Manual, Volume 2 and ensure all POR documents include an	
	overview of the project scope, objectives, requirements, performance	
	criteria, facility description and area requirements. We will ensure all	
	POR documents comply with the GAO cost estimating and assessment	
	guide. OMS will update the current cost and schedule tracking systems and the current status of funds reporting process to include tracking	
	project cost accounting and schedule updates consistent with OMB's	
	Circular A123, as required. OMS will continue to report and document	
	consolidation decisions in the agency's annual Presidential budget	
	submission and the Federal Real Property Profile. Planned: 12/31/22	
21-P00042-130	Recommendation: Adopt and implement policies and procedures on	12/28/20
	military leave and pay requirements that comply with 5 U.S.C. §§ 5538,	
	6323, and 5519.	
	Corrective Action 1.2: The OCFO will determine what system changes	
	may be necessary to update PeoplePlus or make other changes in	
	support of internal controls, where feasible, to comply with any policies	
	and procedures related to military leave and pay policy. Planned: 4/30/22	
	Corrective Action 1.3: If changes are feasible and necessary, the OCFO	
	will develop a schedule for implementation. Planned: 4/30/22	
	Recommendation: Provide resources for supervisors, timekeepers, and	
	reservists on their roles and responsibilities related to military leave under the law and Agency policies.	
	Corrective Action 2.2: The OCFO will provide PeoplePlus training to	
	support roles and responsibilities related to military leave and pay	
	policy. Planned: 4/30/22	
	Recommendation: Establish and implement internal controls that will	
	allow the Agency to monitor compliance with applicable laws, federal	
	guidance, and Agency policies, including periodic internal audits of all	
	military leave, to verify that (a) charges by reservists are correct and	
	supported and (b) appropriate reservist differential and military offset	
	payroll audit calculations are being requested and performed.	
	Corrective Action 3.2: The OCFO will work with the Interior Business	
	Center, EPA's payroll provider, to ensure the necessary timecard	
	corrections identified by the OMS periodic audit were made by the	
	employee and approved by the supervisor in accordance with agency	
	policy. The OCFO will provide a report to the OMS confirming	
	timecard corrections identified by the OMS periodic audit were made	
	by the employee and approved by the supervisor for the OMS to	
	distribute to the appropriate offices. Planned: 6/30/22	
	Recommendation: Require reservists to correct, and supervisors to	
	approve, military leave time charging errors in PeoplePlus that have	
	been identified during the audit or as part of the Agency's actions	
	related to Recommendations 5 and 6.	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	Corrective Action 4.0: The OCFO will work with the agency's payroll provider to confirm the necessary time charging errors identified in the audit were corrected by the employee and approved by the supervisor; and the OCFO will then provide a report to the OMS confirming the necessary time charging errors identified in the audit were corrected by the employee and approved by the supervisor for the OMS to distribute to the appropriate offices. Planned: 3/31/22	
	Recommendation: Recover the approximately \$11,000 in military pay related to unsupported 5 U.S.C. § 6323(a) military leave charges unless the Agency can obtain documentation to substantiate the validity of the reservists' military leave. Corrective Action 5.2: Where applicable, the OCFO will recover any	
21-P00042-130	unsupported leave charges for out-of-service debt. Planned: 12/30/22 Recommendation: Submit documentation for the reservists' military leave related to the approximately \$118,000 charged under 5 U.S.C. § 6323(b) to EPA's payroll provider so that it may perform payroll audit calculations and recover any military offsets that may be due. Corrective Action 6.2: The OCFO will recover any unsupported leave charges for out-of-service debt. Planned: 12/30/22 Recommendation: Identify the population of reservists who took unpaid military leave pursuant to 5 U.S.C. § 5538 and determine whether those reservists are entitled to receive a reservist differential. Based on the results of this determination, take appropriate steps to request that EPA's payroll provider perform payroll audit calculations to identify and pay the amounts that may be due to reservists. Corrective Action 7.2: For amounts due to reservists who are no longer EPA employees, the OCFO will coordinate with the IBC on the amounts due. Planned: 8/29/22 Recommendation: For the time periods outside of the scope of our audit (pre-January 2017 and post-June 2019), identify the population of reservists who charged military leave under 5 U.S.C. § 6323(b) or 6323(c), and determine whether military offset was paid by the reservists. If not, review reservists' military documentation to determine whether payroll audit calculations are required. If required, request that EPA's payroll provider perform payroll audit calculations to identify and recover military offsets that may be due from the reservists under 5 U.S.C. § 6323 and 5519. Corrective Action 8.2: For any unsupported leave charges, The OMS will coordinate with the IBC to initiate the process to recover any military offsets. The OCFO will recover any unsupported leave charges for out-of-service debt. Planned: 8/29/22 Recommendation: Report all amounts of improper payments resulting from paid military leave for inclusion in the annual Agency Financial Report, as required by the Payment Integrity Informat	12/28/20

FY Audit Number	Recommendations and Corrective Actions	Report Date
	during the FY 2021 A-123 Internal Review period and report any	
	identified improper payment amounts in the FY 2021 AFR. Planned: 12/1/22	
21-P00042-451	Recommendation: Adopt and implement policies and procedures on	12/28/20
	military leave and pay requirements that comply with 5 U.S.C. §§ 5538, 6323, and 5519.	
	Corrective Action 1.1: The OMS will update policy and finalize procedures to comply with statutory requirements. Planned: 4/30/22	
	Recommendation: Provide resources for supervisors, timekeepers, and reservists on their roles and responsibilities related to military leave	
	under the law and Agency policies.	
	Corrective Action 2.1: The OMS will update policy and finalize	
	procedures to comply with statutory requirements. Planned: 4/30/22	
	Recommendation: Establish and implement internal controls that will	
	allow the Agency to monitor compliance with applicable laws, federal	
	guidance, and Agency policies, including periodic internal audits of all	
	military leave, to verify that (a) charges by reservists are correct and supported and (b) appropriate reservist differential and military offset	
	payroll audit calculations are being requested and performed.	
	Corrective Action 3.1: The OMS will conduct periodic human capital	
	audits to ensure compliance with the updated military leave policy.	
	Planned: 6/30/22	
	Recommendation: Require reservists to correct, and supervisors to	
	approve, military leave time charging errors in PeoplePlus that have	
	been identified during the audit or as part of the Agency's actions	
	related to Recommendations 5 and 6.	
	Corrective Action 4.1: The OCFO will work with the agency's payroll	
	provider to confirm the necessary time charging errors identified in the	
	audit were corrected by the employee and approved by the supervisor;	
	and the OCFO will then provide a report to the OMS confirming the	
	necessary time charging errors identified in the audit were corrected by	
	the employee and approved by the supervisor for the OMS to distribute	
	to the appropriate offices. Planned: 6/30/22	
	Recommendation: Recover the approximately \$11,000 in military pay	
	related to unsupported 5 U.S.C. § 6323(a) military leave charges unless the Agency can obtain documentation to substantiate the validity of the	
	reservists' military leave.	
	Corrective Action 5.1: For any unsupported leave charges, the OMS	
	will coordinate with the IBC, the agency's payroll provider, to initiate	
	the process to recover the military pay, and where applicable, the	
	OCFO will recover any unsupported leave charges for out-of-service	
	debt. Planned: 5/31/22	
	Recommendation: Submit documentation for the reservists' military	
	leave related to the approximately \$118,000 charged under 5 U.S.C. §	
	6323(b) to EPA's payroll provider so that it may perform payroll audit	
	calculations and recover any military offsets that may be due.	
	Corrective Action 6.1: The OMS will work with EPA's programs and	
	regions to collect documentation related to the identified military leave	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	charges. For any unsupported leave charges, the OMS will coordinate with the IBC to initiate the process to recover any military offsets. Planned: 5/31/22	
21-P00042-451	Recommendation: Identify the population of reservists who took unpaid military leave pursuant to 5 U.S.C. § 5538 and determine whether those reservists are entitled to receive a reservist differential. Based on the results of this determination, take appropriate steps to request that EPA's payroll provider perform payroll audit calculations to identify and pay the amounts that may be due to reservists. Corrective Action 7.1: The OCFO will provide the OMS with the population of reservists charging military leave. The OMS will conduct a review of this population to determine which items need to be provided to the IBC for audit calculation of whether military offsets were paid accurately. Planned: 9/30/22 Recommendation: For the time periods outside of the scope of our audit (pre-January 2017 and post-June 2019), identify the population of reservists who charged military leave under 5 U.S.C. § 6323(b) or 6323(c), and determine whether military offset was paid by the reservists. If not, review reservists' military documentation to determine whether payroll audit calculations are required. If required, request that EPA's payroll provider perform payroll audit calculations to identify and recover military offsets that may be due from the reservists under 5 U.S.C. §§ 6323 and 5519. Corrective Action 8.1: The OCFO will provide the OMS with the population of reservists charging military leave. The OMS will conduct a review of this population to determine which items need to be provided to the IBC for audit calculation of whether military offsets were paid accurately. Planned: 9/30/22 Corrective Action 8.2: For any unsupported leave charges, The OMS will coordinate with the IBC to initiate the process to recover any military offsets. The OCFO will recover any unsupported leave charges for out-of-service debt. Planned: 9/30/22	12/28/20
21-F00045-130	Recommendation: Strengthen and improve the preparation and management review of the financial statements so that errors and misstatements are detected and corrected. Corrective Action: The agency has implemented numerous actions in FY 2020 which will improve the preparation and review of financial statements, including a new financial statement preparation checklist and software package. The agency will continue to review its processes for preparing financial statements and identify additional improvements to strengthen the preparation process further. In addition, the agency will prepare and release all component statement audits at the same time to allow for uniform footnote disclosures and to ensure that accrual adjustments are applied in the same manner for all statements. Planned: 3/31/22 Recommendation: Analyze adjustments and corrections to the financial statements so that such adjustments are appropriate, accurate, and properly supported by documentation.	1/5/21

FY Audit Number	Recommendations and Corrective Actions	Report Date
	Corrective Action: The agency makes every effort to ensure that adjustments and corrections appropriate, accurate, and properly supported, however, in addition to the actions taken under recommendation one, we will continue to review with staff the need to include more of the supporting analysis and rationale behind the adjustments made and the accounting basis for them. Management reviews of journal vouchers will continue, and additional training will be provided as needed. Planned: 3/31/22 Recommendation: Record accounts receivable and earned revenue in the appropriate fiscal year. Corrective Action: The FY 2019 adjustments were completed prior to issuance of the final financial statements. Monthly reconciliations will be performed to ensure the accounts receivable and earned revenue are recorded in the appropriate period. Planned: 3/31/22 Recommendation: In coordination with the assistant administrator for Land and Emergency Management, analyze e-Manifest billings so that accounts receivable and earned revenue are recorded accurately. Corrective Action: Monthly reconciliation will be performed to ensure	
21-E00072-164	the accounts receivable and earned revenue are recorded accurately. Planned:3/31/22 Recommendation: Develop program objectives and measures and implement data-collection processes to determine the risk-reduction and pollution-prevention outcomes of the Special Local Needs program. Corrective Action: 40 CFR 162.154(c) requires EPA to make a final decision on disapproval of a State registration, and provide written notification thereof to the State, within 90 days of the effective date of the registration. To implement Recommendation 1, OCSPP will undertake a data review effort to assess how the Agency's review process is performing on the requirement to either disapprove or acknowledge a 24(c) action within 90 days. Data collection will be undertaken for 12 months, followed by an evaluation of the collected data. Using this data, by July 1, 2022, OCSPP will develop a performance measure to track how the program is performing relative to the 90-day response timeline in 40 C.F.R. 162. The measure will include data on the performance of the office regarding this timing goal. This analysis will inform OCSPP on whether it is necessary to make changes to the review process to achieve the 90-day requirement. Planned: 7/1/22	2/10/21
21-P00094-451	Recommendation: Create a software license inventory policy, which will include identifying the number of licenses, license-counts authorized, overall costs of licenses, maintenance fees, and contracts used for each licensed software. Track and report savings produced by software licensing inventory and report the savings as part of the Office of Management and Budget's annual Spend Under Management data. Corrective Action 10: Create a software license inventory policy, which will include identifying the number of licenses, license-counts authorized, overall costs of licenses, maintenance fees, and contracts used for each licensed software. Track and report savings produced by	03/10/21

FY Audit Number	Recommendations and Corrective Actions	Report Date
	software licensing inventory and report it as part of the U.S. Office of Management and Budget's annual Spend Under Management data. Planned: 12/31/22	
21-P00114-167	Recommendation: Develop and implement controls to verify that the Resource Conservation and Recovery Act referrals to the Superfund program are added to Superfund Enterprise Management System for further Superfund program attention, as necessary. Corrective Action: OLEM/OSRTI will: (1) update the Superfund Program Implementation Manual (SPIM) as appropriate to include clearer timelines on updating the RCRAInfo identification number currently tracked in the Superfund Enterprise Management System (SEMS); (2) verify sites referred from RCRA to Superfund are added to SEMS for further Superfund program attention, as necessary; and (3) revise OSRTI-managed SEMS public search tools and publicly available SEMS computer reports to include the SEMS RCRAInfo identification number variable. Planned: 3/31/22 Recommendation: Develop and implement controls to verify that the Superfund program deferrals to the Resource Conservation and Recovery Act are added to RCRAInfo for further Resource Conservation and Recovery Act attention, as necessary. Corrective Action: OLEM/ORCR will (1) evaluate the existing policies and process for Superfund deferrals to RCRA; (2) identify gaps; and, (3) identify corrective measures, as needed, to meet program needs, such as identifying Superfund program deferrals to RCRA in RCRAInfo. Planned: 9/30/23	3/29/21
	Recommendation: Develop and maintain a crosswalk of Superfund Enterprise Management System and corresponding RCRAInfo identification numbers. Corrective Action: OLEM will work with EPA's Facility Registry Service (FRS) team in OMS-EI to create and maintain a solution which allows users to obtain the crosswalk of SEMS and RCRAInfo identification numbers. Planned: 12/31/22 Recommendation: Develop and implement controls to identify and eliminate overlap of environmental indicators between Resource Conservation and Recovery Act Corrective Action and Superfund Programs and include this information in public queries, such as Cleanups in My Community. Corrective Action 6.1: OLEM will standardize communications on the Cleanups in My Community webpage regarding the intersection of RCRA Corrective Action and Superfund cleanup programs, including environmental indicator designations at sites. Planned: 6/30/22 Corrective Action 6.2: OLEM will implement controls to check between programs when environmental indicators are established in the future to prevent double-counting and inconsistencies. Planned: 3/31/23	

EPA GAO Open Recommendations and Recommendations Closed as Unimplemented

EPA G.	AO Open	Recommendations and Recommen	dations Closed as Unimplemented
Report Number	Report Issue Date	Recommendation Text	Status
GAO- 06-148	2006-01-04	The Administrator, EPA, should take a number of steps to further protect the American public from elevated lead levels in drinking water. Specifically, to improve EPA's ability to oversee implementation of the lead rule and assess compliance and enforcement activities, EPA should ensure that data on water systems' test results, corrective action milestones, and violations are current, accurate, and complete.	EPA and GAO continue to engage on this topic. The agency expects that the modernized SDWIS database will have the necessary information and an efficient mechanism to evaluate if data are current, accurate, and complete. In December 2021, EPA requested closure of this recommendation.
GAO- 08-440	2008- 03-07	To develop timely chemical risk information that EPA needs to effectively conduct its mission, the Administrator, EPA, should require the Office of Research and Development to re-evaluate its draft proposed changes to the IRIS assessment process in light of the issues raised in this report and ensure that any revised process periodically assesses the level of resources that should be dedicated to this significant program to meet user needs and maintain a viable IRIS database.	From FY 2018-2021, the IRIS Program capacity has remained unchanged (approximately 40 assessment FTE, \$11 million/FY). The Program has sufficient staff and budgetary resources to advance the 17 chemical assessments as prioritized by EPA program and regional offices and as listed on the IRIS Program Outlook. See documentation provided on July 15, 2021. EPA is engaging in an ongoing series of IRIS briefings with the GAO and parties are coming closer to agreement.
GAO- 11-381	2011- 06-17	To improve EPA's ability to oversee the states' implementation of the Safe Drinking Water Act and provide Congress and the public with more complete and accurate information on compliance, the Administrator of EPA should resume data verification audits to routinely evaluate the quality of selected drinking water data on health-based and monitoring violations that the states provide to EPA. These audits also should evaluate the quality of data on the enforcement actions that states and other primacy agencies have taken to correct violations.	EPA and GAO continue to engage on this topic. The agency expects that the modernized SDWIS database will have the necessary information and an efficient mechanism to evaluate if data are current, accurate, and complete. In December 2021, EPA requested closure of this recommendation.

Report Number	Report Issue Date	Recommendation Text	Status
GAO- 11-381	2011- 06-17	To improve EPA's ability to oversee the states' implementation of the Safe Drinking Water Act and provide Congress and the public with more complete and accurate information on compliance, the Administrator of EPA should work with the states to establish a goal, or goals, for the completeness and accuracy of data on monitoring violations. In setting these goals, EPA may want to consider whether certain types of monitoring violations merit specific targets. For example, the agency may decide that a goal for the states to completely and accurately report when required monitoring was not done should differ from a goal for reporting when monitoring was done but not reported on time.	EPA and GAO continue to engage on this topic. The agency expects that the modernized SDWIS database will have the necessary information and an efficient mechanism to evaluate if data are current, accurate, and complete. In December 2021, EPA requested closure of this recommendation.
GAO- 12-42	2011- 12-09	To better ensure the credibility of IRIS assessments by enhancing their timeliness and certainty, the EPA Administrator should require the Office of Research and Development, should different time frames be necessary, to establish a written policy that clearly describes the applicability of the time frames for each type of IRIS assessment and ensures that the time frames are realistic and provide greater predictability to stakeholders.	The IRIS Integrated Assessment Plans and Systematic Review Protocols document extensively, considerations which inform the timelines presented in the IRIS Program Outlook. In addition to scientific considerations, timelines presented in the Program Outlook also reflect the needs of the nominating program and regions. Updates to the timelines occur at least three times a year (February, June, October). The most recent October 20201 Program Outlook lists all 157 ongoing IRIS chemical assessments. EPA is engaging in an ongoing series of IRIS briefings with the GAO and parties are coming closer to agreement.
GAO- 12-791	2012- 09-26	To enhance federal agencies' ability to realize enterprise architecture benefits, the Secretaries of the Departments of Agriculture, the Air Force, the Army, Commerce, Defense, Education, Energy, Homeland Security, the Interior, Labor, the Navy, State, Transportation, the Treasury, and Veterans Affairs; the Attorney General; the Administrators of the Environmental Protection Agency, General Services Administration,	Closed – Not Implemented In an effort to reduce the reporting burden on agencies, OMB stopped requiring agency reports of enterprise architecture outcomes. Implementation is no longer required.

Report Number	Report Issue Date	Recommendation Text	Status
		National Aeronautics and Space Administration, and Small Business Administration; the Commissioners of the Nuclear Regulatory Commission and Social Security Administration; and the Directors of the National Science Foundation and the Office of Personnel Management should fully establish an approach for measuring enterprise architecture outcomes, including a documented method (i.e., steps to be followed) and metrics that are measurable, meaningful, repeatable, consistent, actionable, and aligned with the agency's enterprise architecture's strategic goals and intended purpose.	
GAO- 12-791	2012-09-26	To enhance federal agencies' ability to realize enterprise architecture benefits, the Secretaries of the Departments of Agriculture, the Air Force, the Army, Commerce, Defense, Education, Energy, Homeland Security, the Interior, Labor, the Navy, State, Transportation, the Treasury, and Veterans Affairs; the Attorney General; the Administrators of the Environmental Protection Agency, General Services Administration, National Aeronautics and Space Administration, and Small Business Administration; the Commissioners of the Nuclear Regulatory Commission and Social Security Administration; and the Directors of the National Science Foundation and the Office of Personnel Management should periodically measure and report enterprise architecture outcomes and benefits to top agency officials (i.e., executives with authority to commit resources or make changes to the program) and to OMB.	Closed – Not Implemented In an effort to reduce the reporting burden on agencies, OMB stopped requiring agency reports of enterprise architecture outcomes. Implementation is no longer required.

Report Number	Report Issue Date	Recommendation Text	Status
GAO- 13-145	2013- 08-08	To improve EPA's management of the conditional registration process, the Administrator of EPA should direct the Director of the Office of Pesticide Programs to complete plans to automate data related to conditional registrations to more readily track the status of these registrations and related registrant and agency actions and identify potential problems requiring management attention.	This work is planned for completion by December 31, 2022.
GAO- 13-249	2013-03-22	To better position EPA to collect chemical toxicity and exposure-related data and ensure chemical safety under existing TSCA authority, while balancing its workload, and to better position EPA to ensure chemical safety under existing TSCA authority, the Administrator of EPA should direct the appropriate offices to develop strategies for addressing challenges that impede the agency's ability to meet its goal of ensuring chemical safety. At a minimum, the strategies should address challenges associated with: (1) obtaining toxicity and exposure data needed to conduct ongoing and future TSCA Work Plan risk assessments, (2) gaining access to toxicity and exposure data provided to the European Chemicals Agency, (3) working with processors and processor associations to obtain exposure-related data, (4) banning or limiting the use of chemicals under section 6 of TSCA and planned actions for overcoming these challengesincluding a description of other actions the agency plans to pursue in lieu of banning or limiting the use of chemicals, and (5) identifying the resources needed to conduct risk assessments and implement risk management decisions in order to meet its goal of ensuring chemical safety.	In 2021, the GAO narrowed their focus to Item #5 of the recommendation. OCSPP met with GAO in January 2022 to provide an update regarding resources and risk management.

Report Number	Report Issue Date	Recommendation Text	Status
GAO- 13-369	2013- 05-10	To ensure that EPA maximizes its limited resources and addresses the statutory, regulatory, and programmatic needs of EPA program offices and regions when IRIS toxicity assessments are not available, and once demand for the IRIS Program is determined, the EPA Administrator should direct the Deputy Administrator, in coordination with EPA's Science Advisor, to develop an agencywide strategy to address the unmet needs of EPA program offices and regions that includes, at a minimum: (1) coordination across EPA offices and with other federal research agencies to help identify and fill data gaps that preclude the agency from conducting IRIS toxicity assessments, and (2) guidance that describes alternative sources of toxicity information and when it would be appropriate to use them when IRIS values are not available, applicable, or current.	Although EPA and GAO were at an impasse regarding implementation of this recommendation, the recent and ongoing series of IRIS briefings with the GAO enabled the two parties to reach an agreement. The agency anticipates closure of this recommendation by Q4 of FY 2022.
GAO- 14-413	0012	To ensure the effective management of software licenses, the Administrator of the Environmental Protection Agency should develop an agencywide comprehensive policy for the management of software licenses that addresses the weaknesses we identified.	The agency developed and implemented the Software Asset Management (SAM) tool in CY 2021. Population of the tool, communication across the agency, and training are ongoing. The agency anticipates completion of the effort on September 30, 2022. Once completed, the agency will work to develop a comprehensive policy that addresses the centralized management of licenses.
GAO- 14-65	2013- 11-06	To improve the agency's implementation of PortfolioStat, the Administrator of the Environmental Protection Agency should direct the CIO to develop a complete commodity IT baseline.	In December 2021, EPA provided documentation supporting full implementation of this recommendation. The agency requested closure.
GAO- 14-65	2013- 11-06	To improve the agency's implementation of PortfolioStat, in future reporting to OMB, the Administrator of the Environmental Protection Agency should direct the CIO to fully describe the following	EPA considers this recommendation implemented. The agency has made tremendous progress in reducing Commodity IT expenditures by developing and implementing Commodity IT Enterprise Shared Services.

Report Number	Report Issue Date	Recommendation Text	Status
		PortfolioStat action plan elements: (1) consolidate commodity IT spending under the agency CIO; (2) establish targets for commodity IT spending reductions and deadlines for meeting those targets; and (3) establish criteria for identifying wasteful, low-value, or duplicative investments.	Additionally, the agency has 3 mechanisms that identify wasteful, low-value, or duplicative investments. Information Technology (IT) Portfolio Reviews (ITPRs) is an annual IT portfolio review of each of the 22 Programs and Regions. EPA considers this recommendation to be fully implemented and requested closure.
GAO- 14-65	2013- 11-06	To improve the agency's implementation of PortfolioStat, the Administrator of the Environmental Protection Agency should direct the CIO to report on the agency's progress in consolidating the managed print services and strategic sourcing of end user computing to shared services as part of the OMB integrated data collection quarterly reporting until completed.	In December 2020, EPA provided documentation of the requests that were used to purchase the tools needed to complete the enterprise upgrades noted in GAO's report as well as Performance Statement. The agency requested closure of the recommendation.
GAO- 14-80	2013-12-05	To enhance the likelihood that TMDLs support the nation's waters' attainment of water quality standards and to strengthen water quality management, the Administrator of EPA should develop and issue new regulations requiring that TMDLs include additional elementsand consider requiring the elements that are now optionalspecifically, elements reflecting key features identified by NRC as necessary for attaining water quality standards, such as comprehensive identification of impairment and plans to monitor water bodies to verify that water quality is improving.	EPA maintains that the actions taken to strengthen the TMDL program satisfy the intent of the recommendation. However, the agency is reviewing and considering recent feedback from GAO.
GAO- 15-617	2015- 09-15	To improve the agency's IT savings reinvestment plans, the Administrator of the Environmental Protection Agency should direct the CIO to ensure that the agency's integrated data collection submission to OMB includes, for all reported initiatives, complete plans to reinvest any resulting cost savings and avoidances	EPA developed a recommended Reinvestment Plan and delivered a CIO Reinvestment Plan decision brief on 12/09/21. The agency is establishing an implementation plan and timeline based on CIO guidance.

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		from OMB-directed IT reform-related efforts.	
GAO- 16-530	2016- 07-14	The EPA Administrator should direct OGD and program and regional offices, as appropriate, as part of EPA's ongoing streamlining initiatives and the development of a grantee portal, once EPA's new performance system is in place, to ensure that the Office of Water adopts software tools, as appropriate, to electronically transfer relevant data on program results from program-specific databases to EPA's national performance system.	The BFS Performance Results Data Entry Import feature was deployed for use in April 2021, followed by training for potential users. System data shows that the new feature is in use. The agency requested closure of this recommendation.
GAO- 16-530	2016- 07-14	The EPA Administrator should direct OGD and program and regional offices, as appropriate, as part of EPA's ongoing streamlining initiatives and the development of a grantee portal, to expand aspects of EPA's policy for certain categorical grants, specifically, the call for an explicit reference to the planned results in grantees' work plans and their projected time frames for completion, to all grants.	EPA is considering a grantee web-based portal. The agency will continue to provide progress updates to auditors.
GAO- 16-79	2015- 11-19	To better monitor and provide a basis for improving the effectiveness of cybersecurity risk mitigation activities, informed by the sectors' updated plans and in collaboration with sector stakeholders, the Administrator of the Environmental Protection Agency should direct responsible officials to develop performance metrics to provide data and determine how to overcome challenges to monitoring the water and wastewater systems sector's cybersecurity progress.	In FY 2021, the Water Sector Coordinating Council conducted a cybersecurity survey of the water sector. This survey included performance metrics. In addition, EPA has been conducting cybersecurity assessments at individual water and wastewater utilities using technical assistance providers. These assessments also use cybersecurity performance metrics. The agency requested closure.
GAO- 17-424	2017- 09-01	The Assistant Administrator for Water of EPA's Office of Water and the Assistant Administrator of EPA's Office of Enforcement and Compliance Assurance should develop a statistical analysis that incorporates	EPA has a continuing dialogue surrounding this topic with GAO. The agency expects the modernized SDWIS database will have the necessary information and an efficient mechanism to evaluate if data are current, accurate, and

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		multiple factorsincluding those currently in SDWIS/Fed and others such as the presence of lead pipes and the use of corrosion controlto identify water systems that might pose a higher likelihood for violating the LCR once complete violations data are obtained, such as through SDWIS Prime.	complete. EPA requested closure of the recommendation.
GAO- 18-148	2017- 11-07	The Administrator of the Environmental Protection Agency (EPA) should ensure that the CIO of EPA establishes an agency-wide policy and process for the CIO's certification of major IT investments' adequate use of incremental development, in accordance with OMB's guidance on the implementation of FITARA, and confirm that it includes: a description of the CIO's role in the certification process; a description of how CIO certification will be documented; and a definition of incremental development and time frames for delivering functionality, consistent with OMB guidance.	On 3/2/22, EPA submitted documentation supporting full implementation and requested closure.
GAO- 18-410	2018- 07-12	The Director, working with the Study, should ensure that as the Study finalizes its reporting format, it fully incorporates leading practices of performance reporting.	EPA submitted supporting documentation and a request for closure in December 2022. On 3/3/22, GAO alerted EPA that the recommendation is in review for closure.
GAO- 18-453	2018- 07-19	The EPA Region 10 Administrator should work with the management conference on future updates to the CCMP to help prioritize among the indicators that currently lack measurable targets and ensure that such targets are developed for the highest priority indicators where possible.	The Puget Sound Partnership (NEP) continues to be on schedule to finalize their next CCMP by summer 2022. The document will include updated vital signs/measures and associated indicators. The agency will request closure at that time.
GAO- 18-93	2018- 08-02	The Administrator of the Environmental Protection Agency should ensure that the agency's IT management policies address the role of the CIO for key responsibilities in the six areas we identified.	EPA provided documentation supporting agency actions to define CIO role and key responsibilities. Awaiting GAO feedback.

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GAO- 19-22	2019- 03-20	The Administrator of the Environmental Protection Agency should develop a documented policy or clarify existing policy to implement the statutory requirement to consult with ANCs on the same basis as Indian tribes under Executive Order 13175.	EPA held EPA's Grants Webinar for Tribes as previously reported, from which materials were made available to tribes. OITA has completed and made available OMB-required funding award Merit Review Checklists for General Assistance Program (GAP), Performance Partnership Grants (PPGS), and Direct Implementation Tribal Cooperative Agreements (DITCAS) in 2021. Merit Review Checklists were created for all EPA tribal, and other, funding award programs by the respective EPA offices and are available. The agency requested closure.
GAO- 19-280	2019- 07-08	The EPA Administrator should direct EPA officials responsible for appointing advisory committee members to follow a key step in its appointment process—developing and including draft membership grids in appointment packets with staff rationales for proposed membership—for all committees.	EPA considers this recommendation to be fully implemented and requested closure of this recommendation.
GAO- 19-280	2019- 07-08	EPA's Designated Agency Ethics Official should direct EPA's Ethics Office, as part of its periodic review of EPA's ethics program, to evaluate— for example, through audits or spot- checks—the quality of financial disclosure reviews for special government employees appointed to EPA advisory committees.	Implementation of an electronic financial disclosure reporting system for special government employees is expected to be complete by the end of FY 2022.
GAO- 19-384	2019- 07-25	The Administrator of EPA should establish a process for conducting an organization-wide cybersecurity risk assessment.	EPA is engaged with a third Party Federally Funded Research Development Corporation (FFRDC) to help develop and an organizational wide cybersecurity risk assessment. This process is expected to begin developmental Q3 FY 2022 with the intent of executing Q3 FY 2023.
GAO- 19-384	2019- 07-25	The Administrator of EPA should fully establish and document a process for coordination between cybersecurity risk management and enterprise risk management functions.	EPA is updating current processes for Enterprise Risk Management and Cybersecurity Risk Assessment to build out a single Enterprise Risk Management Program starting in Spring FY 2022. Implementation is planned for Q2 FY 2023.

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GAO- 19-543	2019- 09-16	The Administrator of EPA, as chair of the working group, should develop guidance for agencies on what they should include in their environmental justice strategic plans.	The Environmental Justice Interagency Working Group (EJ IWG) no longer exists, and federal environmental justice efforts are being organized under the Council on Environmental Quality (CEQ) under Executive Order 14008. EPA is working with CEQ to carry out three main efforts under the Executive Order: develop an environmental justice screening tool, identify funding opportunities, and identify areas to update the previous Executive Order 12898.
GAO- 19-543	2019- 09-16	The Administrator of EPA, as chair of the working group, should develop guidance or create a committee of the working group to develop guidance on methods the agencies could use to assess progress toward their environmental justice goals.	The Environmental Justice Interagency Working Group (EJ IWG) no longer exists, and federal environmental justice efforts are being organized under the Council on Environmental Quality (CEQ) under Executive Order 14008. EPA is working with CEQ to carry out three main efforts under the Executive Order: develop an environmental justice screening tool, identify funding opportunities, and identify areas to update the previous Executive Order 12898.
GAO- 19-543	2019- 09-16	The Administrator of EPA, as chair of the working group, and in consultation with the working group, should clearly establish, in its organizational documents, strategic goals for the federal government's efforts to carry out the 1994 Executive Order.	The Environmental Justice Interagency Working Group (EJ IWG) no longer exists, and federal environmental justice efforts are being organized under the Council on Environmental Quality (CEQ) under Executive Order 14008. EPA is working with CEQ to carry out three main efforts under the Executive Order: develop an environmental justice screening tool, identify funding opportunities, and identify areas to update the previous Executive Order 12898.
GAO- 19-543	2019- 09-16	The Administrator of EPA, as chair of the working group, and in consultation with the other working group members, should update the 2011 Memorandum of Understanding and renew the agencies' commitments to participate in the interagency collaborative effort and the working group.	The Environmental Justice Interagency Working Group (EJ IWG) no longer exists, and federal environmental justice efforts are being organized under the Council on Environmental Quality (CEQ) under Executive Order 14008. EPA is working with CEQ to carry out three main efforts under the Executive Order: develop an environmental justice screening tool, identify funding opportunities, and

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			identify areas to update the previous Executive Order 12898.
GAO- 20-126	2019- 12-12	The Administrator of EPA should update security plan for the selected operational system to identify a description of security controls, and the individual reviewing and approving the plan and date of approval.	The DWCMS SSP has been updated to reflect the missing information, including a description of security controls, and the individual reviewing and approving the plan and date of approval.
GAO- 20-126	2019- 12-12	The Administrator of EPA should update the security assessment report for the selected operational system to identify the summarized results of control effectiveness tests.	The latest SAR for DWCMS has been updated. This SAR identifies and provides details (Appendix A) as well as the summarized results of control effectiveness tests as a part of the security assessment for the system.
GAO- 20-126	2019- 12-12	The Administrator of EPA should update the list of corrective actions for the selected operational system to identify the specific weakness, estimated funding and anticipated source of funding, key remediation milestones with completion dates, changes to milestones and completion dates, and source of the weaknesses.	EPA is in the process of updating the POAM item. Program Office has completed its remediation efforts. OISP validating POA&M can be closed
GAO- 20-126	2019- 12-12	The Administrator of EPA should prepare the letter authorizing the use of cloud service for the selected operational system and submit the letter to the FedRAMP program management office.	EPA's CIO issued a memo granting the ATO for DWCMS on August 28, 2019.
GAO- 20-126	2019- 12-12	The Administrator of EPA should develop guidance requiring that cloud service authorization letter be provided to the FedRAMP program management office.	EPA has an SOP, dated November 12, 2019, for submitting agency ATO letters to FedRAMP
GAO- 20-129	2019- 10-30	The Administrator of the Environmental Protection Agency should ensure that the agency fully implements each of the eight key IT workforce planning activities it did not fully implement.	EPA considers this recommendation to be fully implemented. The agency requested closure.
GAO- 20-24	2020- 01-16	The Director of Water Security of EPA, as Chair of the Water Sector Government Coordinating Council, should work with the council to identify existing technical assistance providers and engage these providers	EPA continues to work across the water sector and with its established network to provide technical assistance, knowledge, financing, and other tools to ensure investments made in water infrastructure

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		in a network to help drinking water and wastewater utilities incorporate climate resilience into their projects and planning on an ongoing basis.	are sustainable and resilient in the long term.
GAO- 20-299	2020- 02-25	The Administrator of the Environmental Protection Agency should take steps to consult with respective sector partner(s), such as the SCC, DHS, and NIST, as appropriate, to collect and report sector-wide improvements from use of the framework across its critical infrastructure sector using existing initiatives.	EPA consulted with sector partners, including the Water Sector Coordinating Council and DHS, to collect and report sector wide improvements from use of the Framework. The agency continues to coordinate with DHS to address this recommendation.
GAO- 20-597	2020- 09-28	The Assistant Administrator of the Office of Water should develop an agreement with HHS's Offices of Child Care and Head Start on their roles and responsibilities in implementing the Memorandum of Understanding on Reducing Lead Levels in Drinking Water in Schools and Child Care Facilities. For example, these agreements may include the ways in which guidance and information will be shared with states and Head Start grantees, such as through webinars or email, and how frequently.	EPA continues to disagree with the need for this recommendation because the action requested is being implemented in coordination with the HHS and 13 other federal and non-federal partners committed to the reduction of lead levels in drinking water in schools. In support of this position, the agency provided documentation titled "EPA Efforts to Implement the Memorandum of Understanding on Reducing Lead in Schools and Child Care Facilities and Child Care Facilities in Drinking Water" that offers more detail of EPA's efforts related to reduce lead levels in schools & childcare facilities.
GAO- 20-597	2020- 09-28	The Assistant Administrator of the Office of Water should direct the Office of Water to specify how it will track progress toward the outcomes of the Memorandum of Understanding on Reducing Lead Levels in Drinking Water in Schools and Child Care Facilities and determine how it will regularly monitor and update the MOU. For example, the Office of Water could develop performance measures for each of the MOU's outcomes. In addition, the Office of Water could submit annual reports on progress toward achieving the MOU's outcomes or it could plan to update the agreement at specific intervals.	EPA continues to disagree with the need for this recommendation because the action requested is being implemented in coordination with the HHS and 13 other federal and non-federal partners committed to the reduction of lead levels in drinking water in schools. The agency shared documents with GAO titled "EPA Efforts to Implement the Memorandum of Understanding on Reducing Lead in Schools and Child Care Facilities and Child Care Facilities in Drinking Water" and "Chronological List of Activities Underway to Address the Recommendations" which provide more details associated with these efforts.

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GAO- 20-73	2019- 10-18	The Administrator of EPA should clarify how EPA's actions to manage risks to human health and the environment from the potential impacts of climate change effects at nonfederal NPL sites align with the agency's current goals and objectives.	OLEM will ensure its actions to address climate change effects at nonfederal NPL sites align with the goals and objectives in the FY 2022-2026 EPA Strategic Plan.
GAO- 20-81	2019- 11-21	The Environmental Protection Agency Administrator should evaluate training needs for agency officials or others involved in reviewing the merits of researchers' data management plans and, if additional training is found to be warranted, develop and provide such training.	Instructional and training materials were shared EPA-wide through the intranet site and through the Public Access Forum members. Additionally, EPA's Science and Technology Policy Council agreed to a recommendation by the agency's Public Access Forum to reconstitute a training workgroup. The training workgroup is charged with reviewing existing training materials, evaluating gaps, and developing and disseminating new training materials. EPA requested closure of this recommendation.
GAO- 20-95	2020- 01-31	The Assistant Administrator for EPA's Office of Enforcement and Compliance Assurance should clearly document in guidance to the regional offices how they should use the definition of informal enforcement actions to collect data on these actions.	The updated guidance is currently under review with agency leadership. The document focuses on key terms used in EPA's enforcement program. The principal purpose is to promote consistency and clarity in the use of these terms, which will support EPA's efforts to use, report, track, and measure the deployment of enforcement response tools and their utility in expeditiously returning facilities to compliance. EPA plans to complete implementation in 2022.
GAO- 20-95	2020- 01-31	The Assistant Administrator for EPA's Office of Enforcement and Compliance Assurance should clearly document in guidance to the regional offices that they should collect data on compliance assistance activities and specify which mechanism to use to maintain the data, such as ICIS.	OECA is tracking compliance assistance activities for the National Compliance Initiatives (NCI). Reporting of NCI compliance assistance accomplishments are included in the NCI End of Year reporting process. Entering the data into ICIS is voluntary.
GAO- 20-95	2020- 01-31	The Assistant Administrator for EPA's Office of Enforcement and Compliance Assurance should include the known limitations of data in its annual reports and provide information on the intended use of EPA's data.	In the fiscal year 2020 Enforcement Annual results report/website, the agency created and provided a webpage to describe how best to interpret the data presented in its "Fiscal Year EPA Enforcement and Compliance Annual

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			Results." EPA requested closure of this recommendation.
GAO- 21- 103181	2021- 09-21	The Administrator of EPA should fully describe available public comment data, including any limitations, to external users of the data. This should include coordination with GSA, as the manager of Regulations.gov, as appropriate.	EPA met with GSA and other federal agencies identified in the GAO report. EPA is updating the website to include additional information on the availability of public comment data.
GAO- 21-12	2021- 01-21	The Administrator of EPA should direct its chemical safety and security programs to collaborate with partners and establish an iterative and ongoing process to identify the extent to which the facilities that it regulates are also covered by the CFATS program.	EPA collaborated with DHS to draft a joint interagency procedure. DHS, EPA, DOT, and ATF are all signatories to the final document. DHS will provide the interagency document and request for closure of the recommendation on behalf of all four agencies following final signature.
GAO- 21-12	2021-01-21	EPA should collaborate with the DHS's Cybersecurity and Infrastructure Security Agency to assess the extent to which potential security gaps exist at water and wastewater facilities and, if gaps exist, develop a legislative proposal for how best to address them and submit it to the Secretary of Homeland Security and Administrator of EPA, and Congress, as appropriate.	EPA agrees with this recommendation and is coordinating with DHS to address implementation.
GAO- 21-150	2020-10-20	The Associate Administrator of EPA's Office of Congressional and Intergovernmental Relations should update Performance Partnership Grant (PPG) best practices guidance for tribes to clarify, for EPA and tribal staff, how PPGs operate, including that tribes may use PPG funds for any activity that is eligible under any grant eligible for inclusion in PPGs.	Program Guidance (NPG) serves as the main document to communicate the agency's operational priorities, strategies, and performance measures. Due in part to the findings of GAO's report, OCIR will include more foundational guidance related to PPGs in its FY 2023-2024 NPG. The FY 2023-2024 NPG also will cite different reference resources including the best practices guide; a group of regional and headquarters staff is working to revise the best practices guide with the goal of posting the revised guides in Spring of 2022.

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GAO- 21-150	2020-10-20	The Director of EPA's Office of Grants and Debarment, working with each region's grant management office, should develop and nationally distribute onboarding materials for grant specialists and project officers new to working with Indian tribes that includes guidance specific to working with tribes and tribal grants.	OGD reviewed existing training and consulted with partners to determine training needs. OGD is now working to update existing training that will include information on issues unique to working with tribal grants.
GAO- 21-150	2020- 10-20	The Principal Deputy Assistant Administrator of EPA's Office of Air and Radiation, the Assistant Administrator of EPA's Office of Water, and the Director of EPA's American Indian Environmental Office should update and nationally distribute guidance for project officers and tribes that clarifies documentation requirements and eligibility definitions for quality assurance project plans and the Indian Environmental General Assistance Program.	QAPP Review Process: The QAPP for Grants Project work is ongoing. The streamlining process has primarily implemented through EPA's E-Enterprise Leadership Council. General Assistance Program: The GAP program work is ongoing. The program is currently developing a new Guidance (to update 2013 Guidance) and a new allocation formula, both of which will clarify eligibility, funding levels, and other requirements.
GAO- 21-156	2020-12-18	The Administrator should direct the Assistant Administrator of the Office of Research and Development to provide more information publicly about where chemical assessments are in the development process, including internal and external steps in the process, and changes to assessment milestones.	The IRIS Program updated the IRIS chemical landing pages to reflect the current step of the process for each assessment (e.g., Agency Review, Interagency Review). EPA and GAO have a continuing dialogue regarding the remaining steps toward closure.
GAO- 21-156	2020- 12-18	The Administrator should direct the Assistant Administrators of program offices and Regional Administrators to develop and make available guidance for chemical assessment nominations. Such guidance could include information such as how to select chemicals for IRIS assessment nomination or for high priority needs, criteria explaining how Assistant and Regional Administrators determine which nominations to support and which they may choose not to support, and how to document these decisions.	In February 2022 EPA and GAO consulted regarding the path to closure of this recommendation. Implementation is currently in process.

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GAO- 21-156	2020- 12-18	The Administrator should direct the Assistant Administrator of the Office of Research and Development to issue criteria for how chemical assessment nominations are selected for inclusion in the IRIS Program's list of assessments in development and provide quality information about such topics as defining high-priority chemicals, prioritizing assessment	EPA provided documentation supporting full implementation to GAO in March 2022. The agency requested closure.
GAO- 21-156	2020- 12-18	work, and determining the IRIS Program's capacity to undertake work. The Administrator of EPA should direct the Office of Research and Development to continue evaluating the survey process used to solicit IRIS user needs and assess key elements, such as its purpose and timing, to facilitate the collection of quality	EPA provided documentation supporting full implementation to GAO in March 2022. The agency requested closure.
GAO- 21-156	2020- 12-18	information. The Administrator of EPA should include in ORD's strategic plan (or subsidiary strategic plans) identification of EPA's universe of chemical assessment needs; how the IRIS Program is being resourced to meet user needs; and specific implementation steps that indicate how IRIS will achieve the plan's objectives, such as specific metrics to define progress in meeting user needs.	EPA has partially implemented this recommendation and is meeting regularly with auditors in 2022 to address the remaining aspects.
GAO- 21- 164SU	2020- 10-27	Recommendations from this restricted report are not publicly available.	Not Publicly Available
GAO- 21-290	2021- 07-12	The Assistant Administrator of EPA's Office of Enforcement and Compliance Assurance should revise its guidance to select files for its State Review Framework assessments of state-reported data to incorporate statistically valid probability sampling.	EPA agrees with this recommendation. The agency will complete decisions related to the State Review Framework file sampling methodology by 3/31/23.
GAO- 21-290	2021- 07-12	The Assistant Administrator of EPA's Office of Enforcement and Compliance Assurance should ensure that consolidated, complete, and updated information on all data	The agency plans to complete this consolidation by 9/30/22.

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		limitations is disclosed on the State Water Dashboard.	
GAO- 21-290	2021- 07-12	The Assistant Administrator of EPA's Office of Enforcement and Compliance Assurance should develop a plan to determine the overall accuracy and completeness of the permit limit and discharge monitoring report data recorded in its national database.	The agency is addressing this recommendation with a two-phase plan: 1) EPA will continue to work with states to identify and correct problems that prevent proper transfer of discharge monitoring report data to the Integrated Compliance Information System. NPDES and work to maximize the amount of discharge monitoring report data and all necessary permit limit data in the system. 2) The agency will develop a methodology to examine the accuracy of the discharge monitoring report and permit limit data received by the ICIS-NPDES system from authorized states. Completion is estimate for 2025.
GAO- 21-290	2021- 07-12	The Assistant Administrator of EPA's Office of Enforcement and Compliance Assurance should develop a performance measure to track the reduction in pollutant discharges resulting from enforcement actions for facilities in significant noncompliance and disclose any limitations.	The agency is addressing recommendation in two ways: 1) EPA will continue to report annually the Estimated Water Pollutants resulting from enforcement actions (Estimated Water Pollutants Reduced, Treated or Eliminated for the Clean Water Act NPDES Program) in the Enforcement and Compliance Annual Results that also will include a page identifying data limitations. 2) The agency will develop a methodology and outcome measure for tracking the extent to which the significant noncompliance national compliance initiative achieves reductions in illegal pollutant discharges. EPA anticipates the implementation of this new measure by 12/31/22.
GAO- 21-291	2021- 03-26	The Assistant Administrator for EPA's Office of Water should develop definitions for all utility ownership types for regional offices and states to use when entering data on ownership type in EPA's Safe Drinking Water Information System and should verify and correct the data as needed.	EPA generally agrees that it would be useful to conduct another CWSS to collect updated information on drinking water utilities. The updated information could be used, along with other sources such as contaminant occurrence data and peer reviewed studies on contaminant health effects and treatment technologies, to inform EPA's regulatory activities as well as other efforts.

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GAO- 21-291	2021- 03-26	The Assistant Administrator for EPA's Office of Water should conduct another Community Water System Survey to establish an updated, accurate baseline of drinking water utility information for rulemaking and other purposes.	EPA does not require water system ownership information for the implementation of SDWA. However, EPA and its partners in SDWA implementation find value in improving the clarity and accuracy of information on the characteristics of public water systems. The agency is currently working to modernize SDWIS and plans to incorporate the definitions for the six ownership categories into the updated version of SDWIS. EPA requested closure of this recommendation.
GAO- 21-38	2020-11-12	The Assistant Administrator of EPA's Office of Air and Radiation, in consultation with state and local agencies, should develop, make public, and implement an asset management framework for consistently sustaining the national ambient air quality monitoring system. Such a framework could be designed for success by considering the key characteristics of effective asset management described in our report, such as identifying the resources needed to sustain the monitoring system, using quality data to manage infrastructure risks, and targeting resources toward assets that provide the greatest value.	EPA continues to engage with state, tribal, and local partners on planning and establishing an asset management plan. The agency expects to roll out a proposed approach on asset management during 2022 for stakeholder feedback and estimates plan completion in 2023.
GAO- 21-38	2020-11-12	The Assistant Administrator of EPA's Office of Air and Radiation, in consultation with state and local agencies and other relevant federal agencies, should develop and make public an air quality monitoring modernization plan to better meet the additional information needs of air quality managers, researchers, and the public. Such a plan could address the ongoing challenges in modernizing the national ambient air quality monitoring system by considering leading practices, including establishing priorities and roles, assessing risks to success, identifying the resources needed to achieve goals,	EPA worked with stakeholders to initiate planning for a modernization strategy. Coinciding with this initial work, EPA received funds through the American Rescue Plan (ARP) for enhanced air quality monitoring. In the planning for distribution of ARP funds, EPA considered the GAO call for modernization in the planning of a grant competition and direct awards for air monitoring agencies. EPA plans to engage stakeholders in both large and small groups during 2022 to continue to map out what modernization looks like for all parties. This critical information will inform the priorities for the modernization strategy.

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		and measuring and evaluating progress.	
GAO- 21-413	2021- 06-30	The Administrator of the Environmental Protection Agency should ensure that collaboration occurs between the SBIR program office and the Office of Inspector General to establish fraud indicators and train applicants.	EPA agrees with this recommendation and is working with the Office of Inspector General to review Small Business Innovation Research program fraud indicators and modify materials currently used for training applicants as necessary. The estimated completion date is 12/1/22
GAO- 21-42	2020- 11-24	The Administrator of the Environmental Protection Agency should take additional steps to complete and document a fraud risk profile for the purchase card program that aligns with the leading practices in the Fraud Risk Framework and includes an assessment of how, if at all, the risk profile differs for purchase card use in support of disaster response.	On 2/4/22 GAO confirmed that this recommendation is considered fully implemented and scheduled for formal closure.
GAO- 21-63	2021-01-15	The Assistant Administrator for EPA's Office of Enforcement and Compliance Assurance should coordinate with states to collect information on the use of the designated representative, either through its annual cooperative agreement work plans with states or another mechanism. The collection of information on use could include consistently compiling the information obtained through inspections across states—specifically, whether farmworkers are using designated representatives and whether farmers are providing the information to the designated representatives within the time frames required by the WPS.	EPA considers this recommendation to be fully implemented and has requested closure. GAO is currently reviewing.

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GAO- 21-63	2021- 01-15	The Director for EPA's Office of Pesticide Programs should, in the agency's guidance, on its website, or through another mechanism, explain EPA's expectations about the appropriate use of the pesticide information obtained by a designated representative, including describing potential misuse of such information.	The agency coordinated with the Association of American Pest Control Officials - State FIFRA Issues Research and Evaluation Group (AAPCO/SFIREG) to provide information on their members' use of the designated representative provision. AAPCO/SFIREG received responses from twenty-seven states, one tribe and the District of Columbia. According to the respondents to the AAPCO/SFIREG questions, there was compliance with the designated representative provision in their states. However, some respondents thought additional training and compliance assistance materials could be helpful. Full implementation is anticipated by January 2023.
GAO- 21-78	2020- 12-18	EPA's Assistant Administrator for Water should develop guidance for water systems that outlines methods to use ACS data and, where available, geospatial lead or other data to identify high-risk locations in which to focus lead reduction efforts, including tap sampling and lead service line replacement efforts.	The agency is currently developing guidance on lead service line replacement. This guidance will include, but is not limited to, information on selecting inventory format such as a map, as well as multiple factors to consider for prioritizing the investigation of Lead Status Unknown service lines. EPA will share the guidance with GAO when it is finalized.
GAO- 21-78	2020- 12-18	EPA's Assistant Administrator for Water should incorporate use of (1) ACS data on neighborhood characteristics potentially associated with the presence of lead service lines and (2) geospatial lead data, when available, into EPA's efforts to address the Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts.	The LCRR's requirement for water systems to create inventories of LSLs will allow communities to overlay LSL locations with ACS data, including EPA's EJ Screen tool, to assess the presence of LSLs in relation to neighborhood characteristics. EPA issued a Federal Register Notice on 12/17/21 summarizing the input from the public engagements and announcing the conclusion of the LCRR review.
GAO- 21-78	2020- 12-18	EPA's Assistant Administrator for Water should develop a strategic plan that meets the WIIN Act requirement for providing targeted outreach, education, technical assistance, and risk communication to populations affected by the concentration of lead in public water systems, and that is	The agency developed a strategic plan that meets the WIIN Act requirements under SDWA 1414(c)(5). EPA continues to focus on implementation of communication and lead reduction efforts for vulnerable populations and disadvantaged communities.

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		fully consistent with leading practices for strategic plans.	
GAO- 21-82	2020- 12-09	The Assistant Administrator for EPA's Office of Enforcement and Compliance Assurance should communicate final guidance for future national initiative cycles to all states before the effective date of the national initiatives.	OECA communicated the final National Initiative guidance to all states as in the fall of 2020. The next National Initiative cycle will begin in FY 2024 and OECA will continue the practice.
GAO- 21-82	2020- 12-09	The Assistant Administrator for EPA's Office of Enforcement and Compliance Assurance should incorporate lessons learned from the initial effort to engage earlier and more continuously with states when developing the office's plan for how EPA will work with states on future national initiatives.	OECA will incorporate lessons learned from working with states during the FY 2020 - 2023 cycle into the upcoming cycle beginning in FY 2024.
GAO- 21-82	2020- 12-09	The Assistant Administrator for EPA's Office of Enforcement and Compliance Assurance should ensure that officials document the outcomes of EPA's primary method of assessing enforcement and compliance activities at the regional level—in-person and videoconference meetings—including progress toward performance goals that support the agency's strategic objectives.	EPA considers this recommendation to be fully implemented and has requested closure.
GAO- 21-87	2020- 12-18	The Director of EPA's Office of Resource Conservation and Recovery should develop an implementation plan for conducting a study and developing recommendations for administrative or legislative action regarding the effect of existing public policies, and the likely effect of modifying or eliminating such incentives and disincentives, upon the reuse, recycling, and conservation of materials, as required by RCRA.	The agency provided the National Recycling Strategy and implementation roadmap to GAO in a December 2021 update. GAO is currently reviewing the implementation plan.

Report Number	Report Issue Date	Recommendation Text	Status
GAO- 21-87	2020- 12-18	The Director of EPA's Office of Resource Conservation and Recovery should develop an implementation plan for conducting a study and developing recommendations for administrative or legislative action regarding the necessity and method of imposing disposal or other charges on packaging, containers, vehicles, and other manufactured goods to reflect the cost of final disposal, the value of recoverable components of the item, and any social costs associated with nonrecycling or uncontrolled disposal, as required by RCRA.	The agency provided the National Recycling Strategy and implementation roadmap to GAO in a December 2021 update. GAO is currently reviewing the implementation plan.
GAO- 21-87	2020- 12-18	The Director of EPA's Office of Resource Conservation and Recovery should, while EPA finalizes and implements its national recycling strategy, incorporate desirable characteristics for effective national strategies, including (1) identifying the resources and investments needed, and balancing the risk reductions with costs; (2) clarifying the roles and responsibilities of participating entities; and (3) articulating how it will implement the strategy and integrate new activities into existing programs and activities.	The agency provided the National Recycling Strategy and implementation roadmap to GAO in a December 2021 update. GAO is currently reviewing the implementation plan.

Working Capital Fund

In FY 2023, the Agency will be in its 27th year of operation of the Working Capital Fund (WCF). The WCF is a revolving fund authorized by law to finance a cycle of operations in which the costs for goods or services provided are charged to the users. The WCF operates like a commercial business within EPA where customers pay for services received, thus generating revenue. Customers include EPA program and regional offices and other federal agencies. The WCF mechanism provides an efficient method for a full cost approach to agency programs. EPA's WCF was implemented under the authority of Section 403 of the Government Management Reform Act of 1994 and the Omnibus Consolidated Appropriations Act of 1997. EPA received permanent WCF authority in the Department of Interior and Related Agencies Appropriations Act of 1998. The Modernizing Government Technology (MGT) Act¹⁸ provided additional authority for information technology development activities in agency working capital funds.¹⁹

EPA's Chief Financial Officer (CFO) initiated the WCF in FY 1997 as part of an effort to: 1) be accountable to agency offices, the Office of Management and Budget, and Congress; 2) increase the efficiency of the administrative services provided to program offices; and 3) increase customer service and responsiveness. The Agency has a WCF Board which provides policy and planning oversight and advises the CFO regarding the WCF financial position. The Board, chaired by a management representative within the Office of the Chief Financial Officer, is comprised of 22 voting members from program and regional offices.

In FY 2023, there will be 15 core agency activities provided under the WCF. These are the Agency's information technology services, agency postage, Cincinnati voice services, background investigations, enterprise human resources IT services, systems development, and facilities alterations managed by the Office of Mission Support; financial and administrative systems, employee relocations, and a budget formulation system managed by the Office of the Chief Financial Officer; the Agency's Continuity of Operations (COOP) site managed by the Office of Land and Emergency Management; regional information technology service and support managed by EPA Region 8; legal services managed by the Office of General Counsel; and multimedia services, and agency servicing contracts managed by the Office of the Administrator.

The Agency's FY 2023 budget request includes resources for these 15 core activities in each National Program Manager's submission, totaling approximately \$414 million. These estimated resources may be adjusted during the year to incorporate any program office's additional service needs during the operating year. To the extent these increases are subject to Congressional reprogramming notifications, the Agency will comply with all applicable requirements. In FY 2023, the Agency will continue to perform relocation services for other federal agencies, delivering high quality services external to EPA.

The Agency anticipates that there may be minor increases and decreases in FY 2023 due to several IT improvements, including increased cloud computing, improved network infrastructure, cybersecurity requirements, continuous diagnostic and mitigation program implementation, and

¹⁸ The MGT Act was enacted as part of the Fiscal Year 2018 National Defense Authorization Act on December 12, 2017.

¹⁹ EPA determined that the Agency's existing WCF meets the requirements of the MGT Act. EPA's WCF provides a range of integral IT infrastructure, application, and hosting services. In addition, EPA's WCF possesses the structure and governance framework to satisfy the requirements for the Technology Modernization Fund (TMF) identified in the MGT Act.

discovery services. Other funding shifts have been included in the FY 2023 WCF plan that relate to the necessary telecommunications and computer support needed by every employee. As part of an overall review and rebalancing of these costs, funds have been shifted across programs to reflect FTE changes as well.

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