United States Environmental Protection Agency

Fiscal Year 2021

Justification of Appropriation Estimates for the Committee on Appropriations

EPA-190-S-20-001

February 2020
www.epa.gov/cj

Introduction and Overview

EPA's Mission

The FY 2021 Budget coincides with EPA's 50th anniversary on December 2, 2020, culminating a celebration which will begin on Earth Day—April 22, 2020. Over the last 50 years, the Agency has worked to fulfill its mission of protecting human health and the environment by improving the nation's air, cleaning up land and water resources, and providing a cleaner, healthier environment. Our Nation has come a long way since EPA was established in 1970. We have made great progress in ensuring community water systems meet all health-based drinking water standards, making rivers and lakes safe for swimming and boating, reducing the smog that clouded city skies, cleaning up lands that were once used as chemical dumps, and providing Americans greater access to information on the safety of the chemicals all around us. Today we can see enormous progress—yet we still have important work to do.

The Budget provides the direction and resources to support the Agency's mission, based upon robust scientific research and analysis in advancing core environmental protections with respect to statutory and regulatory obligations. The EPA engages with state, local, and tribal partners as it creates and implements sensible regulations that also work to enhance economic growth.

Three strategic goals[1] guide EPA's work to protect human health and the environment:

- **Goal 1 – 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.

- **Goal 2 – 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.

- **Goal 3 – 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.

Environmental stewardship that supports a growing economy is essential to the American way of life and key to economic success and competitiveness. The Agency's regulations, policies, and decisions will continue to incorporate robust input from the public through formal and informal mechanisms to ensure fuller understanding of the impact on public health, the environment, the economy, jobs, families, and our communities.

FY 2021 Annual Performance Plan

EPA's FY 2021 Annual Performance Plan and Budget[2] of $6.658 billion represents a $2.399 billion or 26% percent reduction from the Agency's FY 2020 Enacted Budget level. This resource level, which supports 12,610.2 FTE, will enable EPA to address our highest priorities and fulfill our critical mission for the American people. The Budget largely maintains the policy choices of

[1] https://www.epa.gov/sites/production/files/2019-09/documents/fy-2018-2022-epa-strategic-plan.pdf.
[2] The Budget includes a $159 million cancellation of funds.

the FY 2020 President's Budget, and continues to support long-term performance goals in the *FY 2018-2022 EPA Strategic Plan*, FY 2020-2021 Agency Priority Goals (APGs), FY 2021 annual performance goals, and a focused set of priority areas.

The FY 2021 Budget supports our core programs for a cleaner healthier environment. A major component of the Budget request is for infrastructure funding, including drinking water and clean water infrastructure funding, as well as for funding brownfields and Superfund projects. The Budget also includes $82 million for grants to support implementation of America's Water Infrastructure Act of 2018 (AWIA), $35 million for grants to support the 2016 Water Infrastructure Improvements for the Nation Act of 2016 (WIIN), and $25 million to support loans through the Water Infrastructure Finance and Innovation Act (WIFIA) credit program. The federal investment in infrastructure, which also includes the Drinking Water and Clean Water State Revolving Funds, has leveraged significant private investment, improving economic and environmental outcomes in communities across the country.

Environmental protection is a shared responsibility and funds are provided to our state and tribal partners through categorical grant programs. EPA recognizes that states require flexibility in addressing their unique environmental priorities, and the Budget includes funding for Multipurpose Grants to enable states to implement core mission work in a flexible manner. E-Enterprise for the Environment provides a shared governance forum where states, tribes, and EPA work together to streamline processes and leverage technology with the goal to provide accessible, reliable information and to deliver better environmental results, often with lower costs and less burden for the benefit of the public, the regulated community, and government agencies.

A priority area for EPA is to create consistency and certainty for the regulated community and to remove unnecessary or redundant regulations. Removing unnecessary regulatory burdens allows EPA to be a catalyst for economic growth while strengthening our focus on protecting human health and the environment. The Budget supports continued implementation of Executive Order 13783, Promoting Energy Independence and Economic Growth, which directs all federal agencies to identify and propose measures to suspend, revise, or rescind regulatory barriers that impede progress towards energy independence. The Budget also provides essential resources to equip EPA in delivering vital emergency response services in environmental disasters that no one state can handle alone.

EPA will continue to modernize its permitting practices to increase the timeliness of reviews and decisions, while working more collaboratively, transparently, and cost effectively to achieve the Agency's mission. At the same time EPA will seek to improve internal operations to create more efficient and effective administrative processes and better leverage modern technology to accomplish its mission.

EPA also will continue the work it began in FY 2019 of implementing the new Foundations for Evidence-Based Policymaking Act. Implementation of the Act will enhance strategic planning under the Government Performance and Results Modernization Act (GPRMA). EPA will systematically identify the most important evidence the Agency needs to advance its goals and ensure the Agency uses high quality data and information to inform policy and decision making.

In FY 2021, EPA will develop its first full draft learning agenda, in coordination with the development of the *FY 2022–FY 2026 EPA Strategic Plan*.

FY 2020-2021 Agency Priority Goals

The Budget highlights EPA's six FY 2020-2021 APGs[3] that advance EPA priorities and the *FY 2018-2022 EPA Strategic Plan*:

Goal 1, Objective 1.1: **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.

Goal 1, Objective 1.2: **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).

Goal 1, Objective 1.3: **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).

Goal 3, Objective 3.4: **Accelerate permitting-related decisions.** By September 30, 2021, EPA will reduce the backlog of new permitting-related decisions to zero from a baseline of 65; and reduce the backlog of permit renewals by 50% from a baseline of 147. *Note: The work under all strategic goals contributes to this APG, which is agencywide in scope.*

Cross-Cutting (supports multiple strategic goals and objectives): **Reduce childhood lead exposures and associated health impacts.** By September 30, 2021, EPA will: establish drinking water lead testing programs for schools in all states and the District of Columbia; reduce the number of lead nonattainment areas to 10 from a baseline of 13; complete 48 cleanup actions at sites where lead is a contaminant of concern; and increase the recertification rate of lead-based paint renovation, repair, and painting firms to 28 percent from a baseline of 23 percent.

Cross-Cutting (supports multiple strategic goals and objectives): **Reduce per- and polyfluoroalkyl substances (PFAS) risks to the public.** By September 30, 2021, EPA will meet several of the designated Priority Action milestones in the EPA PFAS Action Plan to establish a framework to understand and address PFAS.

FY 2021 Funding Priorities

The FY 2021 President's Budget largely continues the policy direction of prior years while providing funding dedicated to a focused set of emerging national and global environmental challenges that include: Reducing Ocean Pollution and Plastic; Improving the U.S. Recycling

[3] Agency Priority Goals reflect the top two-year priorities that the Agency will implement to advance progress towards the three strategic goals.

System and Reducing Food Loss and Waste; Supporting Opportunity Zones; Advancing Shared Services and Systems Modernization; Implementing Electronic Records; Supporting Circuit Riders Technical Assistance; Taking Action on PFAS; Reducing Nutrients and Harmful Algal Blooms (HABs); and a cross-office Lead Exposure Reduction Initiative. The Budget provides an additional $116.8 million with 35 FTE to address these focus areas, which help to advance EPA's and the Administration's policy priorities; support long-term performance goals in the *FY 2018-2022 EPA Strategic Plan*, the FY 2020-2021 Agency Priority Goals (APGs), and the FY 2021 annual performance goals; as well as help us to meet government-wide management directives and goals.

Protecting our Children

Protecting children's health where children live, learn, and play is important to all Americans. EPA is committed to aggressively addressing lead issues across America by working with communities and partners to further identify and reduce lead exposure. This is especially important for children who are most vulnerable to long-term adverse effects. The Budget includes an additional $45 million to support the Lead Exposure Reduction Initiative and aligns funding to the goals of the *Federal Action Plan to Reduce Childhood Lead Exposure* [4], to advance pending regulatory actions on lead including revision of the Lead and Copper rule, and to conduct research and provide technical assistance regarding lead issues. To concentrate efforts, the Agency developed a FY 2020–2021 APG focused on reducing childhood lead exposures and associated health impacts. Through the *Federal Action Plan to Reduce Childhood Lead Exposure*, EPA is coordinating with other federal agencies to reduce exposure to lead with the aim of ultimately improving children's health. However, beyond lead, children may be exposed to additional environmental hazards in public and faith-based schools and childcare centers, particularly in outdated schools and educational centers.

Nearly 50 million children and 6 million teachers and other adults spend their days in over 100,000 K-12 schools and faith-based educational facilities. Many of these buildings are old, in poor condition, and may contain environmental conditions that pose increased risks to the health of children and staff. To address this multifaceted issue, the FY 2021 Budget proposes $50 million to support a Healthy Schools Grant Program that is intended to address these potential gaps in school environmental health by working with and through our state, tribal, and community partners. This flexible grant program will enable our implementing partners to target their highest-priority efforts to protect human health and the environment in school and other settings. Funding would be available to identify and help prevent, reduce, and resolve environmental hazards and reduce childhood lead exposure, reduce asthma triggers, promote integrated pest management, and reduce or eliminate childhood exposure to one or more toxics in schools across all environmental media.

Infrastructure

The infrastructure of the Nation is not limited to roads and bridges. The infrastructure needs of our communities are broader and include making improvements to drinking water and wastewater infrastructure as well as restoring the Nation's land and waterways. In FY 2021, EPA will focus

[4] https://www.epa.gov/lead/federal-action-plan-reduce-childhood-lead-exposure.

on making infrastructure and public health protection investments in communities by working with and through our state and tribal partners.

Recognizing the importance of modernizing the aging water infrastructure on which the American public depends every day, the Budget supports the President's commitment to infrastructure repair and replacement and would allow states, municipalities, and private entities to finance high-priority infrastructure investments. The FY 2021 Budget includes $1.98 billion for the State Revolving Funds (SRF), approximately $82 million to implement sections of the America's Water Infrastructure Act of 2018 (AWIA) legislation, $35 million for grants to support the 2016 Water Infrastructure Improvements for the Nation Act (WIIN), and $25 million for the Water Infrastructure Finance and Innovation Act (WIFIA) P
rogram.

The SRF funding directly supports infrastructure repair, rehabilitation and replacement and would allow states, municipalities, and private entities to continue to finance high-priority infrastructure investments that protect human health and the environment. The SRFs are a primary source of low-cost capital for small and rural communities that otherwise struggle to obtain resources to build or upgrade wastewater or drinking water infrastructure construction. These resources additionally help to bring national, state and local water systems into compliance with environmental rules and regulations. SRF resources provide critical funding to help replace lead pipes that may leach lead into the Nation's drinking water supply. The Federal Government has invested over $65 billion in grants to help capitalize the SRFs. With the required state match, additional state contributions, and funds from program leveraging, funds made available for loans total over $185 billion since their inception.

Clean and safe drinking water is critical to the health of communities across the Nation. Although most systems consistently provide safe and reliable drinking water, many small systems face challenges with aging infrastructure, increasing costs and decreasing rates bases. To address the needs of a more robust water infrastructure framework, President Trump signed the bipartisan AWIA legislation on October 23, 2018. AWIA was enacted to help address numerous drinking water and wastewater issues in large municipalities and small rural communities. In FY 2021, EPA continues to work with partners in developing implementation guidelines for five new grant programs created by AWIA, including: Drinking Fountain Lead Testing, Drinking Water Infrastructure Resilience, Sewer Overflow Control Grants, Technical Assistance for Treatment Works, and Water Infrastructure and Workforce Investment. Proposed FY 2021 funding for continued implementation of WIIN supports activities to reduce exposure to lead in drinking water and in schools.

With $25 million provided in FY 2021 under the WIFIA appropriation, EPA could potentially provide up to $2 billion in direct credit assistance, which, when combined with other funding sources, could spur over an estimated $4 billion in total infrastructure investment.[5] The WIFIA program is designed to offer credit assistance with flexible terms in order to attract private participation, encourage new revenue streams for infrastructure investment, and allow increased overall infrastructure investment. This makes the WIFIA program's credit assistance a powerful tool to help address a variety of existing and new water infrastructure needs. As of October 2019,

[5] This approximation is based on notional calculations. Subsidy cost is determined on a loan-by-loan basis.

this relatively new program at EPA had issued 14 WIFIA loans totaling over $3.5 billion in credit assistance to help finance over $8 billion for water infrastructure projects and create over 15,000 jobs. The WIFIA Program has an active pipeline of pending applications for projects that may, once approved, result in billions of dollars in water infrastructure investment and thousands of jobs.

Implementing the Opportunity Zone provisions in the Tax Cuts and Jobs Act of 2017 is a priority for the President, and EPA is focused on advancing this work. The FY 2021 Budget proposes an additional $23.1 million with 12 FTE for the Agency to support revitalization efforts in Opportunity Zone communities. Of this amount, $5.1 million is dedicated to increase technical assistance and coordination in Opportunity Zones. $18 million is included as a set-aside within the Brownfields Projects program to support Opportunity Zone development. Opportunity Zones are a catalyst for redevelopment and environmental improvements and the Agency has a role in helping communities attract private sector capital to better solve their environmental challenges. Opportunity Zones also can spur capital investment and business development in economically distressed places, leading to diversified economies, improved job opportunities, and better environmental outcomes. Through the combined funding of SRFs, AWIA, WIFIA, and projects in Opportunity Zones, EPA will ensure that it is serving disadvantaged communities by leveraging private investment to improve the economy and protect human health and the environment.

EPA's infrastructure investments are catalysts for economic growth and environmental protection in communities across America and the Agency will continue to support private and public investment in economic revitalization that improves environmental outcomes across the country. EPA will work to link infrastructure and community assistance program resources to spur similar, non-Agency investments with the goal of enhancing the collective impact those resources have in communities.

Improving Air Quality

In FY 2021, EPA will continue to advance activities in support of the National Ambient Air Quality Standards (NAAQS) and implementation of stationary source regulations to support state, local, and tribal air quality programs. The Agency will continue its Clean Air Act (CAA) mandated responsibilities to administer the NAAQS and will provide a variety of technical assistance, trainings, and information to support implementation of state clean air plans. EPA will continue to prioritize statutorily mandated responsibilities and court-ordered actions. The Agency will continue to focus on states achieving attainment, with an emphasis on improved processes for State Implementation Plans (SIPs) and implementation options. EPA will continue to conduct periodic technology reviews and conduct risk assessments to determine whether Maximum Achievable Control Technology-based National Emission Standards for Hazardous Air Pollutants (MACT-based NESHAP) appropriately protect public health. The FY 2021 Budget includes $437.3 million to support the objective of improving air quality efforts through common sense standards, guidelines and grant assistance.

In FY 2021, the Agency will continue to perform its compliance oversight functions on priority areas where there is evidence to suggest noncompliance and conduct testing activities for pre-certification confirmatory testing for emissions and fuel economy for passenger cars. The Federal

Vehicle and Fuels Standards and Certification Program requests funding of $80.9 million and 296.7 FTE to focus its efforts on certification decisions, which directly support environmental protection and commerce.

The Budget proposes new authority for EPA to establish user fees for entities that participate in the ENERGY STAR Program. By administering the ENERGY STAR Program through the collection of user fees, EPA would continue to provide a trusted resource for state and local governments, consumers, businesses, and other interested parties to reduce energy usage, save money and help protect the environment.

The Agency will continue to focus on air monitoring, which provides critical information to states when developing clean air plans, conducting air research, and communicating with the public. In FY 2021, EPA will provide grants to state, local, and tribal air pollution control agencies to manage and implement their air quality programs. We will work with our state and tribal partners to approve their implementation plans for attaining air quality standards, consistent with statutory obligations, to reduce contaminants that cause or exacerbate health issues. To support our co-regulating partners, $151.9 million is included in the Budget for State and Local Air Quality Management grants, and $8.9 million for Tribal Air Quality Management grants.

Clean and Safe Water

EPA will continue to provide scientific water quality criteria information, review and approve state water quality standards, and review and approve state lists of impaired waters. In FY 2021, the Agency will work with states and other partners on Total Maximum Daily Loads (TMDLs) as required by the Clean Water Act, as well as on waterbody restoration plans for listed impaired waterbodies. EPA also will continue to implement and support core water quality programs that control point-source discharges through permitting and pre-treatment programs. EPA will continue to coordinate and support the protection of the Nation's critical water infrastructure from terrorist threats and all-hazard events through ongoing Homeland Security programs.

EPA will continue to partner with states, drinking water utilities, and other stakeholders to identify and address current and potential sources of drinking water contamination. These efforts are integral to sustainable infrastructure efforts as source water protection can reduce the need for additional drinking water treatment and the associated costs. In FY 2021, the Agency will continue to support small and rural community water systems. For example, EPA will provide circuit rider technical assistance to Indian tribes and rural water systems to help achieve compliance with drinking water and wastewater regulations.

On a larger domestic and international scale, marine litter represents a cross-border environmental waste issue that necessitates immediate action. The Budget calls for a coordinated funding effort to expand trash capture programs, deepen recycling systems, and expand the leadership role of the Agency in international fora like the G7 and G20 to help address this pressing global challenge. The Budget includes an additional $8.4 million with 7 FTE to support reducing ocean pollution and plastic waste.

The Budget requests $320 million for the Great Lakes Restoration Initiative (GLRI) and $7.3 million for the Chesapeake Bay program to support federal coordination and monitoring of these water bodies of national significance. Through the coordinated effort of the GLRI, EPA and other federal agencies are helping to restore the environmental, health and economic benefits the Great Lakes provide to the region's more than 30 million residents. The Budget establishes a cost-share requirement for all grant funding awarded by EPA using GLRI allowing for a provision to waive this requirement for cases of demonstrated financial hardship on the part of the grant recipient. In addition, $3.2 million and 1.2 FTE are requested to coordinate 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.

Nutrients and Harmful Algal Blooms (HABs) Reductions
The FY 2021 Budget proposes an additional $22.4 million with 5.5 FTE to address and reduce harmful algal blooms, which can be caused by nutrient pollution. Included in the request, EPA will establish a new $15 million grant program designed to target both prevention and response actions for harmful algal blooms (HABs) that pose significant health or economic risks. The program will provide data standards and geo-referencing expertise for EPA's research, predictive modeling and monitoring tools and analyses, and policy approaches to target and reduce nutrient pollution that causes HABs and impacts water quality across the country.

Taking Action on PFAS
The Budget allows EPA to continue to aggressively implement the Per- and Polyfluoroalkyl substances (PFAS) Action Plan—the Agency's first multi-media, multi-program, national research, management and risk communication plan to address this class of emerging chemicals.[6] The Agency will coordinate and support stakeholders, including states, tribes, and communities, to identify PFAS in the environment and take actions to prevent or remediate its presence. The Budget request will enable EPA to address needs for policy, regulatory, and enforcement actions across multiple statutory authorities, as well as develop analytical methods, toxicity values, and additional treatment and remediation options that will help states and communities to address PFAS exposures. To elevate PFAS as an area of focus for the Agency, EPA established a new FY 2020–2021 APG to reduce PFAS risks to the public. In FY 2021, an additional $5.9 million with 5 FTE is requested to advance the implementation of the Agency's PFAS Action Plan.

Revitalizing Land and Reducing Waste

The cleanup and reuse of contaminated lands often can play an important role in economically revitalizing a community. EPA's cleanup programs, including Superfund and brownfields, protect human health and the environment and return sites to productive use, which is important to the economic wellbeing of communities. Working collaboratively with partners across the country, EPA engages with communities in site cleanup decisions, fosters employment opportunities in communities during and after remedy construction, promotes the redevelopment of blighted areas, and protects human health and the environment.

[6] https://www.epa.gov/pfas/epas-pfas-action-plan.

The FY 2021 Budget includes $1.104 billion to revitalize land and prevent future contamination. In FY 2021, EPA will continue to emphasize its top priority list of Superfund sites.[7] These sites are targeted for immediate and intensive action to accelerate cleanup and promote site reuse while addressing risks to human health and the environment. The Agency will accelerate cleanup by re-prioritizing some resources to focus on remedial actions, construction completions, ready-for-anticipated-use determinations, and National Priorities List site deletions. Further, the Agency will emphasize efforts to clean up and propel development at Superfund sites that offer the greatest expected redevelopment and commercial potential, as outlined in the recently released Superfund Redevelopment Opportunity Sites webpage,[8] and will promote additional private investment in cleanup activities as recommended by the Superfund Task Force.[9]

In FY 2021, EPA will continue to invest in communities through brownfields grants so they can make progress toward their visions for environmental health, economic growth, and job creation. As of January 2020, brownfields grants awarded by EPA have led to over 88,900 acres of idle land made ready for productive use and over 156,500 jobs and $29.5 billion leveraged. In FY 2021 alone, brownfields program activities have the potential to leverage over 5,500 more jobs and over $1 billion in other funding sources.

Improving the U.S. Recycling System and Reducing Food Loss and Waste

Recycling programs reduce waste, conserve resources for the future, and protect our land and waters. Managing materials sustainably promotes economic growth and reduces environmental impacts, while food waste reduction programs are needed to help reach the Nation's goal of reducing food loss and waste by 50 percent by 2030.[10] In the United States, around 30-40 percent of all available food goes uneaten through loss or waste. Discarded food ends up in communities' landfills and produces methane, which is a potent greenhouse gas. Additionally, communities and businesses are spending unnecessary resources to manage materials that are ultimately wasted. Keeping excess food out of landfills not only helps the environment, but it also can be used to feed people, feed animals, or create energy.

The Agency will advance recycling by providing national leadership and direction on approaches to reduce environmental impacts and increase safe and effective reuse and recycling of materials. EPA also is focused on food loss and waste prevention. These initiatives complement ongoing EPA work in managing materials more sustainably, promoting economic growth, and reducing environmental impacts. Additional resources will be used to conduct a needs assessment of the U.S. recycling industry to inform future work, support grant programs, and encourage the use of recycled materials in manufacturing through a pilot incentive program. One proposed grant program, the Community Recycling Infrastructure and Capacity Building Grant, will support pilots and infrastructure in communities seeking to enhance their capacity to recover and recycle materials. In FY 2021, $5.8 million with 5.5 FTE are requested to support this Agency priority.

Ensuring the Safety of Chemicals

[7] https://www.epa.gov/superfund/superfund-sites-targeted-immediate-intense-action.
[8] https://www.epa.gov/superfund-redevelopment-initiative/superfund-redevelopment-opportunity-sites.
[9] https://www.epa.gov/superfund/superfund-task-force-recommendations.
[10] https://www.epa.gov/sustainable-management-food/united-states-food-loss-and-waste-2030-champions.

In FY 2021, the Agency will continue to prioritize its significant and new responsibilities under The Frank R. Lautenberg Chemical Safety for the 21st Century Act for ensuring that new and existing chemicals are evaluated in a timely manner, and that any unreasonable risks are addressed. EPA will focus on meeting its statutory requirements and mandatory deadlines under the Toxic Substances Control Act and ensure reviews are efficient, effective, and transparent to stakeholders.

For chemicals in commerce, EPA will maintain an ambitious schedule for initiating and completing chemical risk evaluations and, where risks are identified, for initiating and completing regulatory actions to address those risks. In FY 2021, EPA will continue to evaluate risks on the next 20 chemicals and begin to develop risk management approaches for any unreasonable risks identified in the first 10.

New chemicals will be evaluated before they are allowed to be commercialized. Decisions will be based on the best available science and weight of evidence. EPA's toxics program will maintain its 'zero tolerance' goal for preventing the introduction of any unsafe new chemicals into commerce. EPA also will implement the new mandates related to determinations on claims for confidentiality for chemical identities. In addition to fees, $69 million is requested in FY 2021 for the TSCA Chemical Risk Review and Reduction program to support this high priority work. EPA will focus on meeting its statutory requirements and mandatory deadlines.

In FY 2021, the Agency will continue to provide firm and individual certifications for safe work practices for lead-based paint abatement and renovation and repair efforts. The program also will provide for the operation and maintenance of the online Federal Lead-Based Paint program database (FLPP) that supports the processing of applications for training providers, firms, and individuals.

Identifying, assessing, and reducing the risks presented by the pesticides on which our society and economy rely is integral to ensuring environmental and human safety. In FY 2021, EPA will continue to meet its statutory requirements for pesticide registration and registration review, and will invest resources to improve the compliance of pesticide registrations with the Endangered Species Act. Funding also will ensure that pesticides are correctly registered and applied in a manner that protects water quality. Pesticides help provide for effective pest control for homes, schools, gardens, highways, utility lines, hospitals, and drinking water treatment facilities, while also controlling vectors of disease and supporting food production. EPA will continue to implement its responsibility to ensure that pesticides available in the U.S. are safe when used as directed.

Regulatory and Permitting Priorities

The Budget provides resources to ensure EPA is able to meet pressing demands in priority areas, including reviewing and revising regulations, improving the permitting process, and enhancing collaboration with state, tribal, and federal partners. Efforts to identify and address potential hold-ups in the permitting process will continue to ensure that unnecessary delays do not get in the way of environmental protection or economic growth. By the end of FY 2019, EPA reduced the backlog of new permit applications by 65 percent (from 149 to 52 applications, excluding Clean Air Act New Source Review and Title V Operating Permits) through a series of targeted efforts to improve

the efficiency and effectiveness of permitting programs. The Agency will continue this focus and has established an FY 2020–2021 APG to accelerate permitting-related decisions. EPA will continue to be a leader in the government to advance deregulation, accelerate permitting work, and provide technical assistance for our partners. Specific deregulatory and permitting actions and progress are highlighted in program project fact sheets.

Expansion of Fee Funding

EPA proposes several fees in FY 2021 to better align appropriated resources to the Agency's core mission, to provide dedicated funding sources for specific activities, and to better align program costs with beneficiaries. By administering select EPA programs through the collection of user fees, entities benefiting from those programs would directly pay for the services and benefits that the programs provide. EPA is proposing two voluntary user fees that will enable the Agency to provide compliance assistance services to both Risk Management Plan facilities and Facility Response Plan and Spill Prevention Control and Countermeasure facilities. EPA also is proposing to establish ENERGY STAR as a fee-funded program in FY 2021. This fee would allow the Agency to continue to provide a trusted resource for state and local governments, consumers, businesses, and other interested parties, helping them to reduce energy usage, save money and protect the environment. In addition, EPA will continue to work with OMB, other Agencies, and key stakeholders to review potential areas where fee-funding may be an appropriate mechanism to reduce the burden on taxpayers.

Implementing the PMA and Reducing Regulatory Burden

The Administration is committed to creating a leaner, more accountable, less intrusive, and more effective Government. EPA will continue to place an emphasis on reducing unnecessary or duplicative burden to the regulated community. This will be advanced through implementation of the President's Management Agenda and through common sense deregulatory actions that provide greater certainty and better communication to our partners. In support of the PMA, the FY 2021 Budget includes support for upgrading the Agency's enterprise-wide records management system. Efforts to digitize hardcopy records and transition to centralized records centers will ultimately reduce costs, address space needs, and support ongoing program needs for information. The FY 2021 President's Budget request supports ongoing efforts to transition to existing and proposed shared-services such as Treasury's G-Invoicing system which will require upgrades to the Agency's accounting system and related interfaces to support inter-agency work with our federal partners. Furthermore, EPA has eliminated certain programs and activities to focus on the core Agency mission. Programs and activities eliminated in the FY 2021 Budget total approximately $680 million compared to Estimated FY 2020 Enacted Budget levels.

Resource Summary Tables

Environmental Protection Agency
FY 2021 Annual Performance Plan and Congressional Justification

Table of Contents – Resource Summary Tables

APPROPRIATION SUMMARY 3
Budget Authority 3
Full-time Equivalents (FTE) 4

APPROPRIATION SUMMARY

Budget Authority
(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget
Science & Technology	$695,063.1	$716,449.0	$484,733.0
Environmental Programs & Management	$2,596,472.2	$2,663,356.0	$2,236,224.0
Inspector General	$39,929.8	$41,489.0	$39,825.0
Building and Facilities	$27,276.9	$33,598.0	$39,553.0
Inland Oil Spill Programs	$17,368.1	$19,581.0	$16,631.0
IG Transfer	$8,875.9	$11,586.0	$9,747.0
S&T Transfer	$15,050.4	$30,747.0	$19,075.0
Superfund Program	$1,185,757.1	$1,142,422.0	$1,049,789.0
Hazardous Substance Superfund	$1,209,683.4	$1,184,755.0	$1,078,611.0
Leaking Underground Storage Tanks	$98,172.9	$91,941.0	$48,218.0
State and Tribal Assistance Grants	$4,068,673.6	$4,246,232.0	$2,848,310.0
Hazardous Waste Electronic Manifest System Fund	$14,485.5	$0.0	$0.0
Water Infrastructure Finance and Innovation Fund	$32,565.9	$60,000.0	$25,023.0
SUB-TOTAL, EPA	*$8,799,691.4*	*$9,057,401.0*	*$6,817,128.0*
Cancellation of Funds	$0.0	$0.0	-$159,057.0
TOTAL, EPA	*$8,799,691.4*	*$9,057,401.0*	*$6,658,071.0*

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

APPROPRIATION SUMMARY

Budget Authority

Full-time Equivalents (FTE)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget
Science & Technology	1,892.9	1,983.7	1,501.0
Environmental Programs & Management	8,562.2	8,808.6	7,643.7
Inspector General	218.4	227.5	201.4
Inland Oil Spill Programs	79.7	84.8	75.7
IG Transfer	50.3	42.5	40.6
S&T Transfer	61.3	63.1	86.3
Superfund Program	2,407.8	2,530.9	2,466.7
Hazardous Substance Superfund	2,519.4	2,636.5	2,593.6
Leaking Underground Storage Tanks	41.1	46.6	40.7
State and Tribal Assistance Grants	8.1	7.0	5.0
Hazardous Waste Electronic Manifest System Fund	6.9	11.0	16.0
Water Infrastructure Finance and Innovation Fund	22.1	28.4	12.0
Rereg. & Exped. Proc. Rev Fund	104.8	137.3	221.5
WCF-Reimbursable	156.3	200.6	236.0
Deepwater Horizon Natural Resource Damage Assessment	3.6	0.0	0.0
Pesticide Registration Fund	68.9	0.0	0.0
TSCA Service Fee Fund	0.0	0.0	63.6
UIC Injection Well Permit BLM	2.5	0.0	0.0
SUB-TOTAL, EPA	*13,686.9*	*14,172.0*	*12,610.2*
TOTAL, EPA	*13,686.9*	*14,172.0*	*12,610.2*

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

Goal and Objective Overviews

Environmental Protection Agency
FY 2021 Annual Performance Plan and Congressional Justification

Table of Contents – Goal and Objective Overviews

GOAL, APPROPRIATION SUMMARY 7
Budget Authority 7
Authorized Full-time Equivalents (FTE) 8
A Cleaner, Healthier Environment 10
More Effective Partnerships 36
Greater Certainty, Compliance, and Effectiveness 46

GOAL, APPROPRIATION SUMMARY

Budget Authority
(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget
A Cleaner, Healthier Environment	$6,618,509.1	$6,851,819.0	$4,846,285.0
Science & Technology	$166,758.4	$169,839.0	$138,978.0
Environmental Programs & Management	$1,447,438.4	$1,550,252.0	$1,121,508.0
Inland Oil Spill Programs	$13,715.1	$15,700.0	$12,965.0
Hazardous Substance Superfund	$883,255.8	$828,324.0	$717,974.0
Leaking Underground Storage Tanks	$96,188.6	$89,649.0	$45,989.0
State and Tribal Assistance Grants	$3,964,101.4	$4,138,055.0	$2,783,848.0
Hazardous Waste Electronic Manifest System Fund	$14,485.5	$0.0	$0.0
Water Infrastructure Finance and Innovation Fund	$32,565.9	$60,000.0	$25,023.0
More Effective Partnerships	$318,487.7	$323,893.0	$243,870.0
Environmental Programs & Management	$220,903.1	$222,571.0	$184,826.0
Inland Oil Spill Programs	$82.8	$139.0	$0.0
Hazardous Substance Superfund	$2,549.3	$2,338.0	$1,004.0
State and Tribal Assistance Grants	$94,952.5	$98,845.0	$58,040.0
Greater Certainty, Compliance, and Effectiveness	$1,862,694.6	$1,881,689.0	$1,726,973.0
Science & Technology	$528,304.7	$546,610.0	$345,755.0
Environmental Programs & Management	$928,130.7	$890,533.0	$929,890.0
Inspector General	$39,929.8	$41,489.0	$39,825.0
Building and Facilities	$27,276.9	$33,598.0	$39,553.0
Inland Oil Spill Programs	$3,570.2	$3,742.0	$3,666.0
Hazardous Substance Superfund	$323,878.3	$354,093.0	$359,633.0
Leaking Underground Storage Tanks	$1,984.3	$2,292.0	$2,229.0
State and Tribal Assistance Grants	$9,619.7	$9,332.0	$6,422.0
Sub-Total	*$8,799,691.4*	*$9,057,401.0*	*$6,817,128.0*
Cancellation of Funds	$0.0	$0.0	-$159,057.0
TOTAL, EPA	$8,799,691.4	$9,057,401.0	$6,658,071.0

Environmental Protection Agency
FY 2021 Annual Performance Plan and Congressional Justification

GOAL, APPROPRIATION SUMMARY

Authorized Full-time Equivalents (FTE)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget
A Cleaner, Healthier Environment	6,684.1	6,805.2	6,091.2
Science & Technology	482.0	508.5	462.0
Environmental Programs & Management	4,531.2	4,666.4	3,886.0
Inland Oil Spill Programs	66.7	70.6	62.3
Hazardous Substance Superfund	1,352.0	1,337.2	1,342.2
Leaking Underground Storage Tanks	35.5	38.8	33.6
State and Tribal Assistance Grants	8.1	7.0	5.0
Hazardous Waste Electronic Manifest System Fund	6.9	11.0	15.0
Water Infrastructure Finance and Innovation Fund	22.1	28.4	12.0
Rereg. & Exped. Proc. Rev Fund	104.8	137.3	221.5
Deepwater Horizon Natural Resource Damage Assessment	3.4	0.0	0.0
Pesticide Registration Fund	68.9	0.0	0.0
TSCA Service Fee Fund	0.0	0.0	51.6
UIC Injection Well Permit BLM	2.5	0.0	0.0
More Effective Partnerships	1,045.7	1,049.6	855.5
Environmental Programs & Management	1,038.9	1,040.7	852.3
Inland Oil Spill Programs	0.4	0.8	0.0
Hazardous Substance Superfund	5.7	6.1	1.2
WCF-Reimbursable	0.7	2.0	2.0
Greater Certainty, Compliance, and Effectiveness	5,957.1	6,317.2	5,663.5
Science & Technology	1,410.9	1,475.2	1,039.0
Environmental Programs & Management	2,992.1	3,101.5	2,905.4
Inspector General	218.4	227.5	201.4
Inland Oil Spill Programs	12.6	13.4	13.4
Hazardous Substance Superfund	1,161.7	1,293.2	1,250.2
Leaking Underground Storage Tanks	5.6	7.8	7.1

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget
Hazardous Waste Electronic Manifest System Fund	0.0	0.0	1.0
WCF-Reimbursable	155.6	198.6	234.0
Deepwater Horizon Natural Resource Damage Assessment	0.2	0.0	0.0
TSCA Service Fee Fund	0.0	0.0	12.0
TOTAL, EPA	13,686.9	14,172.0	12,610.2

Environmental Protection Agency
FY 2021 Annual Performance Plan and Congressional Justification

A Cleaner, Healthier Environment

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.

Strategic Objectives:

- 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.
- 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.
- Provide better leadership and management to properly clean up contaminated sites to revitalize and return the land back to communities.
- 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.

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

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
A Cleaner, Healthier Environment	**$6,618,509.1**	**$6,851,819.0**	**$4,846,285.0**	**-$2,005,534.0**
Improve Air Quality	$796,211.0	$813,400.0	$437,265.0	-$376,135.0
Provide for Clean and Safe Water	$4,166,384.0	$4,453,694.0	$3,061,826.0	-$1,391,868.0
Revitalize Land and Prevent Contamination	$1,419,194.6	$1,349,146.0	$1,103,839.0	-$245,307.0
Ensure Safety of Chemicals in the Marketplace	$236,719.5	$235,579.0	$243,355.0	$7,776.0
Total Authorized Workyears	6,684.1	6,805.2	6,091.2	-714.0

Goal 1: 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.

Introduction

Pollution comes in many forms with a myriad of impacts on human health and the environment. From the air we breathe, to the water we drink, to the land upon which we live, EPA serves a critical role in protecting all Americans from environmental and chemical hazards. Building upon 50 years of partnerships, the Agency will continue to work in tandem with our state, tribal, and local partners to remediate existing environmental contaminants and prevent new contaminants that may adversely impact human health and the environment.

In FY 2021, the Agency will focus on reducing air pollutants and toxics that can cause or exacerbate health issues by working more effectively with states and tribes to review their implementation plans for attaining air quality standards, re-designating areas to attainment of air quality standards, and streamlining air permitting. In FY 2019, EPA re-designated 12 areas to attainment for various National Ambient Air Quality Standards (NAAQS).

EPA will work with state and tribal partners to provide for clean and safe water by increasing investment in infrastructure for drinking water, wastewater, and stormwater systems. In FY 2019, EPA leveraged more than $10.3 billion in non-federal dollars, increasing the funds available to improve, repair and modernize the nation's water infrastructure. The revolving nature of the Drinking Water and Clean Water SRFs and substantial contributions from our state partners have greatly expanded the scope of federal investment. EPA estimates for every federal dollar contributed to date, communities have received over three dollars of water infrastructure investments in return. EPA will continue to optimize and align its relevant programs to catalyze other resources, support beneficial infrastructure investments, and meet community interests for thriving economies and improved environmental and human health outcomes. In FY 2021, the Agency will continue to prioritize the implementation of the America's Water Infrastructure Act of 2018 (AWIA) and the Water Infrastructure Improvements for the Nation Act of 2016 (WIIN) to improve drinking water and water quality, deepen infrastructure investments, enhance public health and quality of life, increase jobs, and bolster the economy.

In FY 2021, the Agency will take a broad approach to ensure drinking and surface water is free from environmental contaminants. EPA will work to reduce Per- and Polyfluoroalkyl substances (PFAS) risks to the public; implement an initiative to reduce ocean pollution with an emphasis on plastic; and provide resources dedicated to protecting surface water, including funding to reduce Harmful Algal Blooms (HABs). Additionally, EPA will provide technical assistance to small and rural communities which may have different needs than those in urban areas. As an example, EPA will use circuit riders to provide effective on-the-ground assistance to help smaller and rural public water systems and wastewater systems, including those in Indian Country, achieve and sustain environmental compliance.

The Agency will continue to focus on speeding the cleanup of Superfund and brownfields sites, concentrating efforts on a list of top priority sites to advance progress on Superfund areas of concern. In FY 2019, EPA made 48 Superfund sites and 910 brownfields sites ready for anticipated use. As of January 2020, brownfields grants awarded have led to over 88,900 acres of idle land made ready for productive use and over 156,500 jobs and $29.5 billion leveraged.[1] In FY 2021, EPA will continue to provide technical assistance and coordinate with the private sector and all levels of government on a range of air, water, land, and chemical-related issues to help communities, with an increased focus in Opportunity Zones, to meet their environmental and economic goals. EPA also will dedicate funding to improve the U.S. recycling system and reduce food loss and waste.

The Agency's top priority for ensuring the safety of chemicals in the marketplace is the implementation of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, which modernized the Toxic Substances Control Act (TSCA) by creating new standards and processes for assessing chemical safety within specific deadlines. In FY 2019, EPA achieved key milestones for TSCA chemical risk evaluations and risk management actions.

With our partners, we will pay attention to vulnerable populations with an understanding that their needs may differ from those of the general population. Children and the elderly, for example, may be at significantly greater risk from elevated exposure or increased susceptibility to the harmful effects of environmental contaminants and pollutants. Some low-income and minority communities may face greater risks because of proximity to contaminated sites or sources of emissions. Additionally, traditional ways of life for tribal and indigenous populations such as subsistence hunting, fishing, and gathering also may increase the risk of exposure to contaminants. Together with our partners, we will continue making progress in protecting human health and the environment. In FY 2021, EPA will prioritize reducing childhood lead exposure and associated health impacts through the *Federal Action Plan to Reduce Childhood Lead Exposure*. EPA is addressing lead on multiple fronts, including important regulatory actions and targeting resources to the most vulnerable communities. The plan details specific actions to target lead-based paint, lead in drinking water, and lead-contaminated soil, among other sources. These efforts will be supported through the Lead Exposure Reduction Initiative.

A new Healthy Schools Grant Program is requested to address potential gaps in school environmental health information by supporting states, federally recognized Indian tribes, public and faith-based schools and childcare centers, local educational agencies as defined in 20 U.S.C. 7801(30), and non-profit organizations, in the identification and mitigation of potential environmental health issues. This $50 million grant program would ensure availability of dedicated resources to identify and address risks to children where they learn and grow.

These efforts will be supported by strong compliance assurance and enforcement in collaboration with our state and tribal partners, up-to-date training for partners and co-regulators, and the use of the best available science and research to address current and future environmental hazards and to improve the foundation for decision-making. The Agency will continue its collaborative efforts with federal agencies, states, tribes, local governments, communities, and other partners and stakeholders to address existing pollution and prevent or reduce future problems. EPA will directly

[1] EPA's ACRES database.

implement federal environmental laws where eligible tribes or states have not taken program responsibility. Furthermore, the Agency will work in tandem with states, tribes, and local partners to effectively communicate with the public regarding environmental risk and threats. The American public have a right to understand how environmental threats can impact their health and to understand what steps the Agency is taking to address those threats.

FY 2020-2021 Agency Priority Goals

The Budget highlights EPA's six FY 2020-2021 Agency Priority Goals (APGs) that advance EPA priorities and the *FY 2018-2022 EPA Strategic Plan*.[2] All six APGs support work under Goal 1: *A Cleaner, Healthier Environment.* Three of the six APGs directly support Goal 1, *Objective 1.1: Improve Air Quality, Objective 1.2: Provide for Clean and Safe Water,* and *Objective 1.3: Revitalize Land and Prevent Contamination* and are included in the narratives for these objectives. Additionally, two cross-cutting APGs support work under Goal 1:

- *Cross-Cutting:* **Reduce childhood lead exposures and associated health impacts.** By September 30, 2021, EPA will: establish drinking water lead testing programs for schools in all states and the District of Columbia; reduce the number of lead nonattainment areas to 10 from a baseline of 13; complete 48 cleanup actions at sites where lead is a contaminant of concern; and increase the recertification rate of lead-based paint renovation, repair and painting firms to 28 percent from a baseline of 23 percent.

- *Cross-Cutting:* **Reduce per - and polyfluoroalkyl substances (PFAS) risks to the public.** By September 30, 2021, EPA will meet several of the designated Priority Action milestones in the EPA PFAS Action Plan to establish a framework to understand and address PFAS.

Please note that the APG for accelerating permitting-related decisions, which directly supports *Goal 3, Objective 3.4: Streamline and Modernize* involves work under Goal 1 and is agencywide in scope.

FY 2021 Activities

Objective 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.**

Objective 1.1, Improve Air Quality, directly supports the following long-term performance goal in the *FY 2018-2022 EPA Strategic Plan*:

- By September 30, 2022, reduce the number of nonattainment areas to 101.[3]

Objective 1.1, Improve Air Quality, directly supports the following FY 2020-2021 Agency Priority Goal (APG):

[2] For EPA's APG Action Plans and Quarterly Updates, see https://www.performance.gov/EPA/.
[3] The baseline is 166 nonattainment areas as of 10/1/2017.

- **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.

Key priorities for the Agency in FY 2021 continue to be re-designating areas to attainment of National Ambient Air Quality Standards (NAAQS); improving the efficiency of the State Implementation Plan review process; and streamlining the air permitting process. This strategic objective is supported by core air program work highlighted below as well as the progress made in the FY 2018-2019 APG and progress towards the FY 2020-2021 APG to reduce nonattainment areas. As of October 2019, the number of nonattainment areas decreased to 143, from a baseline universe of 166 (as of October 2017).

EPA works in partnership with states to reduce the number of nonattainment areas for the six common pollutants in the United States – particulate matter up to 2.5 and 10 microns ($PM_{2.5}$ and PM_{10}), sulfur dioxide (SO_2), nitrogen oxides (NO_x), ozone, carbon monoxide (CO) and lead (Pb). Between 1970 and 2018, the combined emissions of these six criteria pollutants dropped by 74 percent.[4] This progress occurred while the U.S. economy, as measured by Gross Domestic Product, grew by 275 percent,[5] all while Americans drove more, and population and energy use increased. However, in 2018, approximately 137 million people nationwide continued to live in counties with pollution levels that did not meet standards for at least one criteria pollutant.[6] This is about 40 percent of the U.S. population (based on 2010 census data). EPA works in cooperation with states, tribes, and local governments to design and implement air quality standards and programs. EPA relies on partnerships with other federal agencies, academia, researchers, industry, other organizations, and the public to achieve improvements in air quality and reduce public health risks.

For FY 2021, EPA requests $437.3 million and 1,270.8 FTE to improve air quality. Highlights include:

Criteria Pollutant and Air Toxics Standards Development and Implementation

EPA's criteria air pollutant program is critical to continued progress in reducing public health risks and improving air quality. Listening to and working with state and tribal partners to set and implement standards is key to achieving progress. The criteria pollutant program sets NAAQS, which are then implemented by state, local, and tribal air agencies which have primary responsibility under the Clean Air Act (CAA) for developing clean air plans. For FY 2021, EPA requests $117.8 million for the Federal Support for Air Quality Management program to advance this important work.

In FY 2021, EPA will continue to prioritize key activities in support of attainment of the NAAQS. The Agency will fulfill its CAA responsibilities by collaborating with and providing technical assistance to states and tribes to develop implementation plans for attaining the NAAQS and visibility improvement requirements; reviewing state and tribal implementation plans; acting on

[4] The Clean Air Act (CAA) requires EPA to set National Ambient Air Quality Standards (NAAQS) for six common air pollutants including carbon monoxide, lead, ground-level ozone, nitrogen dioxide, particulate matter, and sulfur dioxide.
[5] https://www.epa.gov/sites/production/files/2019-07/2018_baby_graphic_1970-2018.png.
[6] https://gispub.epa.gov/air/trendsreport/2019/#home.

state implementation plan (SIP) and tribal implementation plan (TIP) submittals consistent with statutory obligations; developing regulations and associated guidance to implement standards; and, addressing transported air pollution. EPA will continue to focus on ways to improve the efficiency and effectiveness of the SIP/TIP process, including the Agency's internal standards for reviewing SIPs and TIPs, with a goal of maximizing timely processing of state/tribal-requested implementation plan actions to help increase progress toward re-designating areas to attainment. In FY 2019, EPA reviewed and acted upon over 360 submitted SIPs.

EPA will continue to develop and implement national emission standards for stationary and mobile sources and work with state, tribal and local air agencies to address air toxics problems in communities. The CAA requires the development of National Emission Standards for Hazardous Air Pollutants (NESHAP) for major sources and area sources; the assessment and determination of whether more health-protective standards are necessary to address remaining risks after implementation of NESHAP; and the periodic review and revision of NESHAP to reflect developments in practices, processes, and control technologies. 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.

Grants for State, Local and Tribal Air Quality Management

For FY 2021, EPA requests $160.9 million to provide federal support for grants to state and local air quality management agencies and to tribes, where applicable, to manage and implement air quality control programs. States, working with EPA, are responsible for SIPs, which provide a blueprint for the programs and activities that states carry out to attain and maintain the NAAQS and comply with visibility obligations. States operate and maintain their existing monitoring networks to collect data used to develop and maintain clean air plans, support research, and inform the public. Some grant funding also will be used to provide training to states and tribes.

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 vehicles, and their fuels. The Program also evaluates new emission control technology and provides information to state, tribal, and local air quality agencies on a variety of transportation programs.

In FY 2021, EPA requests $80.9 million for the Federal Vehicle and Fuels Standards and Certification Program, which will prioritize certification decisions to ensure that manufacturers are able to enter their engines and vehicles into commerce. In FY 2019, EPA issued over 4,700 certificates of conformity which demonstrate that engines, vehicles, equipment, components, or systems conform to applicable emission requirements and may be entered in commerce. The Agency will continue to perform its compliance oversight functions on priority matters, where there is evidence to suggest noncompliance. EPA will continue to conduct testing activities for pre-certification confirmatory testing for emissions and fuel economy for passenger cars.

On November 13, 2018, EPA announced the Cleaner Trucks Initiative, a new rulemaking effort to address NO_X emissions from heavy-duty trucks. In FY 2021, as a part of this rulemaking effort, EPA will evaluate the technologies which can ensure real-world compliance with emissions standards and also will seek opportunities to modernize and streamline the regulatory framework for the heavy-duty highway sector.

Atmospheric Protection Program

In FY 2021, EPA will continue to implement the Atmospheric Protection Program, which requires mandatory greenhouse gas emissions reporting from large industrial source categories in the U.S., covering a total of 41 sectors and approximately 8,000 reporting entities. The data is used to support federal and state-level policy development, and to share with industry stakeholders, state and local governments, the research community, and the public. In FY 2021, EPA also will work to complete the annual *Inventory of U.S. Greenhouse Gas Emissions and Sinks*, a U.S. treaty obligation. In FY 2021, EPA requests $14.5 million for the Atmospheric Protection Program.

ENERGY STAR Program Fee Proposal

In FY 2021, EPA proposes to implement user fees for entities that participate in the ENERGY STAR program. By administering the ENERGY STAR Program through the collection of user fees, EPA would continue to provide a trusted resource for consumers and businesses who want to purchase products that are energy-efficient, save money and help protect the environment. Entities participating in the program would pay a fee that would offset the costs for managing and administering the program. The fee collections would provide funding to replace, to the extent allowable, an upfront appropriation of $46 million that covers FY 2021 expenses to develop, operate, and maintain the ENERGY STAR Program.

Radiation

The Agency measures and monitors ambient radiation through RadNet, a fixed ambient environmental radiation monitoring network that 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. EPA also assesses radioactive contamination in the environment and provides field support to mitigate radioactive releases and exposures.

The Agency also will support federal radiological emergency response operations under the National Response Framework (NRF) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). In FY 2021, EPA's Radiological Emergency Response Team (RERT) will maintain essential readiness to support federal radiological emergency response and recovery operations under the NRF and NCP. EPA participates in interagency training and exercises to maintain the RERT's ability to fulfill EPA's responsibilities. In FY 2021, the Budget includes $12.2 million for the Radiation: Protection and Radiation: Response Preparedness Program Projects.

***Objective 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.**

Objective 1.2, Provide for Clean and Safe Water directly supports the following long-term performance goals in the *FY 2018-2022 EPA Strategic Plan*:

- By September 30, 2022, reduce the number of community water systems out of compliance with health-based standards to 2,700.[7]

- By September 30, 2022, increase by $40 billion the non-federal dollars leveraged by EPA water infrastructure finance programs (Clean Water State Revolving Fund [CWSRF], Drinking Water State Revolving Fund [DWSRF] and Water Infrastructure Finance and Innovation Act [WIFIA]).[8]

- By September 30, 2022, reduce the number of square miles of watershed with surface water not meeting standards by 37,000 square miles.[9]

Objective 1.2, Provide for Clean and Safe Water directly supports the following FY 2020–2021 Agency Priority Goal (APG):

- **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).

Providing support to ensure safe drinking water in communities, increasing investment in water infrastructure projects, and protecting surface water are priorities for EPA. The Nation's water resources are the lifeblood of our communities, supporting our economy and way of life. Across the country, we depend upon reliable sources of clean and safe water. Just a few decades ago, many of the Nation's rivers, lakes, and estuaries were grossly polluted, wastewater received little or no treatment, and drinking water systems provided very limited treatment to water coming through the tap. As of September 2019, over 93 percent of the population served by community water systems received drinking water that meets all applicable health-based drinking water standards, and formerly impaired waters continue to be restored and now support recreational and public health uses that contribute to healthy economies.

[7] 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.)
[8] 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.)
[9] Baseline is 587,536 square miles of impaired waters as of August 30, 2019. (Footnote updated from *FY 2018-2022 Strategic Plan* published February 12, 2018.)

A top priority for EPA is modernizing the outdated and aging water infrastructure on which the American public depends. The America's Water Infrastructure Act of 2018 (AWIA) was recently enacted to help address numerous drinking water and wastewater issues in large municipalities and small rural communities. In addition, the WIFIA program will help accelerate investment in our Nation's water infrastructure by providing long-term, low-cost supplemental loans for regionally and nationally significant projects. In FY 2021, EPA will focus resources on modernizing outdated and aging drinking water, wastewater, and stormwater infrastructure; creating incentives for new water technologies and innovation; and funding the core requirements of the Clean Water Act (CWA) and the Safe Drinking Water Act (SDWA). The Agency will look to provide states and tribes with flexibility to best address their priorities.

EPA will continue to provide loans and grants to states and tribes to improve water infrastructure. Given that investment in infrastructure is necessary for economic growth and environmental protection and that EPA investments are a catalyst for both, EPA's efforts will support private and public investment in economic revitalization and improved environmental outcomes across the country. This requires that EPA strengthen infrastructure in communities through its programs (e.g., the DWSRF, CWSRF, and WIFIA) to better align EPA investments with each other and with other investments in pursuit of economic revitalization and improved environmental outcomes. At the same time, EPA will ensure it is serving disadvantaged communities, leveraging private investment to grow the economy, and protecting human health and the environment.

In FY 2021, EPA requests $3.06 billion and 1,663.4 FTE to support this strategic objective, which also is supported by other core water program work. Highlights include:

Water Infrastructure Investment

EPA has made significant progress in advancing water quality since enactment of the Clean Water Act (CWA), Safe Drinking Water Act (SDWA), and Marine Protection, Research, and Sanctuaries Act over 40 years ago. However, serious water quality and water infrastructure challenges remain. Many communities need to improve and maintain drinking water and wastewater infrastructure as well as to develop the capacity to comply with new and existing standards. Tens of thousands of homes, primarily in tribal and disadvantaged communities and the territories, lack access to basic sanitation and drinking water. EPA will continue to support progress in these communities in FY 2021.

To help drive progress, the Agency has set the FY 2020-2021 APG that by September 30, 2021, EPA will increase by $16 billion the non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF, and WIFIA). During FY 2018 and FY 2019, EPA increased the non-federal dollars leveraged by EPA water infrastructure finance programs by $20 billion, exceeding our two-year FY 2018 – 2019 APG target of $16 billion. In addition to meeting the APG, EPA met all the contributing indicators: Engagements with the Water Infrastructure Community; Tools, Training, and Resources Provided to the Water Infrastructure Community; and SRF State Reviews completed. The success of this metric is due to the collaborative efforts of EPA, states, and local communities.

EPA's water infrastructure programs also benefit from a close relationship with states, municipal, and tribal governments, as well as industry and other public groups. In addition to EPA's long-standing partnerships through the SRFs, the WIFIA credit program is working with both public and private eligible borrowers to fund vital infrastructure projects. WIFIA is an innovative and flexible financing mechanism and, as demonstrated by the first three rounds of applications and selected projects, the program encourages a wide variety of finance approaches.[10] As of October 2019, EPA has issued 14 WIFIA loans totaling over $3.5 billion in credit assistance to help finance over $8 billion for water infrastructure projects and create over 15,000 jobs. WIFIA loans are wide-ranging and have been issued to finance a myriad of projects from a new community drinking water plant in Tennessee, to expanding a groundwater replenishment system in California, to the development of a long-term water supply in Oregon communities that will be built to the highest seismic safety standards for earthquake resiliency. The WIFIA program has an active pipeline of pending applications for projects that, when approved, may result in billions of dollars in water infrastructure investment and thousands of jobs. In FY 2021, WIFIA is expected to leverage significant funding for infrastructure. The $25.0 million requested could provide up to $2 billion in direct credit assistance, which, when combined with other funding sources, could spur over $4 billion in total infrastructure investment.[11]

EPA is focused on implementing the mandates included in the AWIA legislation, which strengthens the federal government's ability to invest in water infrastructure in communities in every state. AWIA strengthens many existing programs within EPA, while creating new programs to tackle significant public health concerns and environmental needs. Composed within AWIA are five program projects including; Drinking Fountain Lead Testing, Drinking Water Infrastructure Resilience, Sewer Overflow Control grants, Technical Assistance for Treatment Works, and Water Infrastructure and Workforce Investment. These programs are vital to protect public health, grow the American economy and ensure that rural and urban communities from coast to coast can access clean and safe water. AWIA will be critical to advance Agency priorities by increasing water infrastructure investment and improving drinking water and water quality across the country. In FY 2021, EPA requests $82 million in grant funding to support AWIA across the five program projects. Of the AWIA grant funding, $10 million will be used to fund the Lead Exposure Reduction Initiative through the Drinking Fountain Lead Testing program. In addition to the AWIA grant funding, EPA requests $20 million for Reducing Lead in Drinking Water and $15 million for Lead Testing in Schools, which were authorized under Water Infrastructure Improvements for the Nation Act, to support the Lead Exposure Reduction Initiative.

Categorical Grants to States and Tribes

Protecting the Nation's water from pollution and contaminants relies on cooperation between EPA, states, and tribes. States and tribes, with EPA support as needed, are best positioned to understand and implement localized solutions to protect their waters. EPA will work with states, territories, tribes, and local communities to better 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.

[10] https://www.epa.gov/wifia/wifia-letters-interest.
[11] This approximation is based on notional calculations. Subsidy cost is determined on a loan-by-loan basis.

In FY 2021, EPA requests funding for ongoing categorical grants that support state and tribal implementation of the CWA and SDWA: Public Water System Supervision, Pollution Control (CWA Section 106), Underground Injection Control (UIC), Wetlands Program Development Grants, and a new grant program to reduce harmful algal blooms (HABs). These targeted funds will assist states in reducing the causes and impacts of HABs, further details are described in the clean water section below. Across all categorical grants, EPA will work with states and tribes to target the funds to core requirements while providing flexibility to best address their priorities. Funding for all the categorical grants to states and tribes to support core water programs is $253.3 million.

Geographic Programs

The EPA geographic programs support efforts to protect and restore various communities and ecosystems impacted by environmental problems. Through a coordinated interagency process led by the EPA, the implementation of the Great Lakes Restoration Initiative (GLRI) is helping to restore the Great Lakes ecosystem. The request of $320 million and 68.5 FTE supports restoration efforts that provide environmental and public health benefits to the region's 30 million Americans and restores the economic health of the region. In addition, $3.2 million and 1.2 FTE are requested to coordinate 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. Due in part to South Florida funding, in 2019, greater than 90 percent of Florida Keys homes and business are on advanced wastewater treatment systems and more than 30,000 septic tanks have been eliminated. Finally, $7.3 million is provided to support critical activities in water quality monitoring in the Chesapeake Bay.

Safe Drinking Water

For FY 2021, EPA requests $101.8 million to support Drinking Water programs. EPA will work to reduce lead risks through an updated Lead and Copper Rule and by developing regulations to implement the Water Infrastructure Improvement for the Nation Act (WIIN) and the Reduction of Lead in Drinking Water Act. EPA also will continue to work with states and tribes to protect underground sources of drinking water from injection of fluids though the UIC program. In addition, EPA will continue work with states to develop the next generation Safe Drinking Water Information System (SDWIS) tools used by the majority of state drinking water programs. The tools will provide many benefits including: improvements in program efficiency and data quality, greater public access to drinking water data, facilitation of electronic reporting, reductions in reporting burdens on laboratories and water utilities, reductions in data management burden for states, and ultimately reductions in public health risk.

EPA's Drinking Water program also supports the FY 2020-2021 Lead APG and the implementation of the *Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts.* The Action Plan will help federal agencies work strategically and collaboratively to reduce exposure to lead and improve children's health. As part of the new Lead APG, EPA will establish drinking water lead testing programs in schools, provide training and technical assistance, and leverage partnerships that support the use of the Training, Testing, and Taking Action toolkits.

EPA's Drinking Water program also supports the FY 2020–2021 PFAS APG and the implementation of elements of EPA's PFAS Action plan related to policy development and regulatory efforts to address PFAS, such as perfluorooctanoic acid (PFOA), perfluorooctane sulfonate (PFOS) and Gen-X chemicals, in drinking water systems. EPA is moving forward with the drinking water standard setting process outlined in the Safe Drinking Water Act for PFOA and PFOS. EPA will work across the Agency—and the Federal Government—to develop a PFAS risk communication toolbox that includes materials that states, tribes, and local partners can use to effectively communicate with the public. In FY 2021, EPA requests $3.3 million with 2.8 FTE to support this work.

Clean Water

In FY 2021, EPA requests $201.8 million for the Surface Water Protection Program, $22.6 million for the Wetlands Program, and $4.7 million for the Marine Pollution Program. The FY 2021 request supports the following core Surface Water Protection program components: water quality criteria, standards and technology-based effluent guidelines; National Pollutant Discharge Elimination System (NPDES); water monitoring; Total Maximum Daily Loads; watershed management; water reuse; water infrastructure and grants management; core wetlands programs and CWA Section 106 program management. Work under these programs supports EPA's long-term performance goal to reduce the number of square miles of watersheds with surface waters not meeting standards. As of September 2019, over 12,700 square miles of waters not attaining water quality standards, as reported in December 2018, are now achieving standards. EPA will continue to implement and support the core water quality programs that control point source discharges through permitting and pre-treatment programs. The NPDES program under the Clean Water Act will continue to work with states to structure the permit program, support its implementation and better pursue protection of water quality on a watershed basis. The FY 2021 request also includes $819 thousand with 0.7 FTE to implement the PFAS Action Plan.

HABs, which can be caused by nutrient pollution, remain a widespread water quality challenge across the country despite decades of effort to achieve reductions. In FY 2021, EPA requests $15.0 million to establish a new competitive grant program to fund prevention and response efforts for HABs that pose significant health or economic risks. The request also includes $2.9 million with 2.5 FTE to support the advancement of a more comprehensive approach to addressing harmful algal blooms, enhancing market mechanisms, and coordinating surveillance pilots, including through Interagency Agreements with other federal partners to better predict HABs. Work under these programs supports EPA's metric to reduce the number of square miles of watersheds with surface waters not meeting standards due to nutrients.

The Agency will continue to ensure waters are clean through partnerships with states and tribes. EPA will provide support to states and municipalities in coastal regions and on major river systems. The FY 2021 requests $4.7 million with 3.0 FTE to expand trash capture and prevention programs tied to water quality and waste management goals to reduce ocean pollution and plastics. The resources would focus on high impact activities, such as expanding trash prevention, clean-up, and monitoring programs. In addition, EPA will continue to emphasize efforts on small and rural community water systems. As part of a larger proposal, $50 thousand is provided to the Agency's

water programs to support circuit rider technical assistance to Indian tribes and rural water systems to help achieve compliance with drinking water and wastewater regulations.

Congress passed several pieces of legislation at the end of 2018, including the Integrated Planning Bill and the Vessel Incidental Discharge Act (VIDA), which assign new programming and oversight responsibilities to EPA. In FY 2021, EPA will continue work to implement the mandates included in the new legislation.

Homeland Security

In FY 2021, EPA will coordinate and support protection of the Nation's critical water infrastructure from terrorist threats and all-hazard events. Under the homeland security mission, EPA will annually train over 2,500 water utilities, state officials, and federal emergency responders on resiliency to natural or manmade incidents that could endanger water and wastewater services. EPA will continue to develop the most efficient mechanisms for detecting and addressing harmful substances in the water distribution system. In addition, EPA will fulfill its obligations under Executive Order (EO) 13636 – *Improving Critical Infrastructure Cybersecurity* – which designates EPA as the lead federal agency responsible for cybersecurity in the water sector. In FY 2021, EPA will conduct nationwide, in-person training sessions in cybersecurity threats and countermeasures for approximately 200 water and wastewater utilities.

Objective 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.**

Objective 1.3, Revitalize Land and Prevent Contamination directly supports the following long-term performance goals in the *FY 2018-2022 EPA Strategic Plan*:

- By September 30, 2022, make 255 additional Superfund sites ready for anticipated use (RAU) site-wide.[12]

- By September 30, 2022, make 3,420 additional brownfields sites RAU.[13]

- By September 30, 2022, make 536 additional Resource Conservation and Recovery Act (RCRA) corrective action facilities RAU.[14]

- By September 30, 2022, complete 56,000 additional leaking underground storage tank (LUST) cleanups that meet risk-based standards for human exposure and groundwater migration.[15]

[12] By the end of FY 2017, 836 Superfund sites had been made RAU site-wide.
[13] From FY 2006 through the end of FY 2017, 5,993 brownfield properties/sites had been made RAU. (Footnote updated from *FY 2018-2022 EPA Strategic Plan* published February 12, 2018.)
[14] 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* published February 12, 2018.)
[15] By the end of FY 2017, 469,898 LUST cleanups had been completed.

Objective 1.3, Revitalize Land and Prevent Contamination directly supports the following FY 2020-2021 Agency Priority Goal (APG):

- **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 sites and 1,368 brownfields sites ready for anticipated use (RAU).

For the FY 2018-2019 APG, EPA made 99 Superfund sites RAU, 97 percent of the two-year goal of 102 sites and 1,771 brownfields sites RAU, 133 percent of the two-year goal of 1,368 sites.

EPA works to improve the health and livelihood of all Americans by cleaning up and returning land to productive use, preventing contamination, and responding to emergencies. In FY 2021, the Agency is accelerating the pace of cleanups and reuse while addressing risks to human health and the environment. EPA uses its resources to enhance the livability and economic vitality of neighborhoods in and around hazardous waste sites, by collaborating with and leveraging efforts of other federal agencies, industry, states, tribes, and local communities. EPA also partners with states, tribes, local communities, and industry to prevent and reduce exposure to harmful contaminants. Superfund and RCRA provide the legal authority for EPA's work to protect and restore land. The Agency and its partners use Superfund authority to clean up uncontrolled or abandoned hazardous waste sites, allowing land to be returned to productive use which benefits communities and the economy. Under RCRA, EPA works in partnership with states and tribes to address risks associated with the generation, transportation, treatment, storage or disposal of waste, and to clean up contamination at active sites. EPA will continue to provide technical assistance and coordinate national efforts to increase the recycling of municipal solid waste and to reduce food loss and waste. The FY 2021 request includes new resources targeted to advance this work and realize the goal of cutting food waste in half in the next decade.

EPA will continue to collaborate with international, state, tribal, and local governments while considering the effects of decisions on communities. The Agency engages communities to help them understand and address risks posed by intentional and accidental releases of hazardous substances into the environment and to ensure that communities have an opportunity to participate in environmental decisions that affect them. Risk communication goes to the heart of EPA's mission and effective risk communication and community engagement builds trust and often leads to better decisions. In all this work, EPA's efforts are guided by scientific data, tools, and research that alert the American people to emerging issues and inform decisions on managing materials and addressing contaminated properties.

In FY 2021, EPA requests $1.104 billion and 2,073.5 FTE to support this objective. To maximize effectiveness, EPA will focus on implementing programs where a federal presence is required by statute. Highlights include:

Cleaning Up Contaminated Sites

EPA's cleanup programs (i.e., Superfund Remedial, Superfund Federal Facilities, Superfund Emergency Response and Removal, RCRA Corrective Action, Underground Storage Tanks and Brownfields) work cooperatively with state, tribal, and local partners to take proactive steps to

facilitate the cleanup and revitalization of contaminated properties. Cleanup programs protect both human health and the environment and return sites to productive use, which is important to the economic wellbeing of communities. Working with partners across the country, EPA engages with communities in site cleanup decisions, fosters employment opportunities in communities, and promotes the redevelopment of blighted areas.

Superfund Remedial

One of EPA's top priorities is accelerating progress on the cleanup and reuse of Superfund sites. The reuse of a site often can play a role in economically revitalizing a community. As of FY 2019, EPA data show that approximately 1,000 Superfund sites are in reuse, more than half the number of sites ever placed on the National Priority List. EPA has data on over 9,100 businesses at 602 of these sites. In FY 2019 alone, these businesses generated $58.3 billion in sales. These businesses employed more than 208,000 people who earned a combined income of over $14 billion. The Superfund Remedial Program demonstrates that environmental protection and economic development can grow hand in hand.

In 2017, EPA convened a Superfund Task Force that identified 42 recommendations to streamline and improve the Superfund process. The recommendations are structured around five goals related to many aspects of Superfund, including site identification, remedy selection and implementation, and subsequent reuse. As of September 2019, all 42 recommendations have been implemented by the Superfund program. Superfund Task Force accomplishments, including detailed information on implementation efforts and performance measures for tracking progress, can be found in the Superfund Task Force Recommendations Final Report.[16]

In FY 2021, the Agency will continue to advance cleanup and revitalize once productive properties. This will be achieved by: removing contamination; enabling economic development; taking advantage of existing infrastructure; and maintaining and improving quality of life. There are multiple benefits associated with cleaning up contaminated sites. For example, recent research indicates that Superfund cleanup lowered the risk of elevated blood lead levels by roughly 8 to 18 percent for children living within two kilometers of a Superfund site where lead is a contaminant of concern.[17] This work supports the FY 2020–FY 2021 Lead APG. Additional research shows that residential property values within three miles of Superfund sites increased between 18.7 to 24.4 percent when sites were cleaned up and deleted from the National Priorities List (NPL).[18]

In FY 2021, EPA requests $482.3 million for the Superfund Remedial Program. EPA will continue its statutory responsibility to provide oversight of potentially responsible parties (PRP)-led activities at Superfund sites, consistent with legal settlement documents, and statutorily required five-year reviews. Additionally, in FY 2021, $1.0 million is requested in the Superfund Remedial Program to support implementation of the PFAS Action Plan, including providing tools to help states and communities assess and address existing contamination.

[16] The Superfund Task Force (SFTF) Recommendations Final Report can be found at: https://semspub.epa.gov/work/HQ/100002231.pdf.

[17] Klemick, H., H. Mason and K. Sullivan. January 2019. Superfund Cleanups and Children's Lead Exposure, NCEE Working Paper 19-01, https://www.epa.gov/sites/production/files/2019-01/documents/2019-01.pdf.

[18] Gamper-Rabindran, Shanti 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.

Superfund Federal Facilities

Federal facility sites are among the largest in the Superfund program, accounting for a high percentage of the annual program cleanup commitments and encompassing some of the most dangerous and unique environmental contaminants, including munitions, radiological waste, and emerging contaminants such as PFAS. EPA works closely with other federal agencies, states, tribes, and stakeholders to ensure protective and cost-effective cleanups at these NPL sites. Cleaning up contaminated sites at federal facilities can serve as a catalyst for economic growth and community revitalization. As part of an FY 2019 study, 22 federal facility Superfund sites in reuse a total of 1,400 businesses generated $9.4 billion in annual sales and provide 115,000 jobs and $7 billion in annual employment income.[19] To further this work, the FY 2021 Budget requests $21.6 million for this program.

Superfund Removal

Over the past decade, EPA completed or oversaw over 3,066 Superfund removal actions across the country. This work is performed as part of the overarching effort to clean up contaminants and protect human health and the environment. In the event of an emergency, EPA's Superfund Emergency Response and Removal Program is charged with preventing, limiting, mitigating, or containing chemical, oil, radiological, biological, or hazardous materials released during and in the aftermath of an incident. Typical 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.[20] In FY 2021, EPA requests $170.7 million for the Superfund Emergency Response and Removal Program.

RCRA Corrective Action

The RCRA Corrective Action Program is responsible for overseeing and managing cleanups at active RCRA sites. States have requested EPA participate in work sharing under this program, and the Agency serves in a lead or support role for a significant number of complex and challenging cleanups in both non-authorized and authorized states. To date EPA has authorized 44 states and one territory to directly implement the RCRA Corrective Action Program.[21] In FY 2019, EPA approved 127 RCRA corrective action facilities as ready for anticipated use. To advance this work in FY 2021, the Budget includes $35.1 million to support the RCRA Corrective Action Program.

Underground Storage Tanks

The Underground Storage Tank (UST) program has achieved significant success in addressing releases since the beginning of the program. Data show that of the approximately 550,900 releases reported since the beginning of the UST program in 1988, there have been 493,589 sites cleaned up (as of the end of FY 2019); 90 percent have reached the equivalent of RAU for this program.

[19] For additional information, refer to: https://www.epa.gov/fedfac/redevelopment-economics-federal-facilities.
[20] For additional information, refer to: https://www.epa.gov/emergency-response/national-oil-and-hazardous-substances-pollution-contingency-plan-ncp-overview.
[21] State implementation of the RCRA Corrective Action program is funded through the STAG (Program Project 11) and matching State contributions.

Approximately 57,300 releases remain that have not reached cleanup completion. EPA is working with states to develop and implement specific strategies and activities applicable to their specific sites to reduce remaining UST releases. A 2018 study found that high profile UST releases decrease nearby property values by 2 to 6 percent. However, once cleanup is completed, property values rebound by a similar margin.[22] EPA requests a total of $52.9 million in FY 2021 for UST direct cleanup and state cooperative agreements.

Brownfields

Approximately 129 million people (roughly 40 percent of the U.S. population) live within three miles of a brownfields site that receives EPA funding.[23] By awarding brownfields grants, EPA is making investments in communities so that they can advance environmental health, economic growth, and job creation. As of January 2020, grants awarded by the program have led to over 88,900 acres of idle land made ready for productive use and over 156,500 jobs and $29.5 billion leveraged. From FY 2006 through the end of FY 2019, 7,741 brownfields properties/sites had been made RAU. During FY 2019, EPA achieved 910 brownfields sites RAU, exceeding the annual target. Ongoing data cleanup activities have improved the quality of the program's statistics.

This program has a direct economic effect, for instance, a 2017 study found that housing property values increased 5 to 15.2 percent near brownfields sites when cleanup was completed.[24] Another 2017 study of 48 brownfields sites showed an estimated $29 to $97 million in additional tax revenue generated for local governments in a single year after cleanup; this is 2 to 7 times more than the $12.4 million EPA contributed to the cleanup of those brownfields.[25] The creation of Qualified Opportunity Zones through the 2017 Tax Cuts and Jobs Act complements EPA's brownfields funding by incentivizing private sector investment in the redevelopment of brownfields located in economically distressed communities. This redevelopment not only improves environmental quality, but also leads to diversified economies, improved job opportunities, and restored fiscal health in municipalities. The FY 2021 Budget provides $129.6 million, including $18 million targeted for Opportunity Zones, to advance brownfields work and continue these positive returns to the environment, public health, and the economy.

Preserving Land

Preventing the release of contamination in the first place can be one of the most cost-effective ways of providing Americans with clean land. In FY 2021, EPA will continue to work with our state and tribal partners to prevent releases of contamination, allowing the productive use of facilities and land and contributing to communities' economic vitality, while avoiding expensive cleanup costs.

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[22]Guignet, D. R. Jenkins, M. Ranson, and P. Walsh. 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.

[23] U.S. EPA, Office of Land and Emergency Management Estimate 2017. Data collected includes: (1) site information as of the end of FY16; and (2) census data from the 2011-2015 American Community Survey.

[24] 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://ideas.repec.org/a/ucp/jaerec/doi10.1086-689743.htm.

[25] Sullivan, Karen A. 2017. Brownfields Remediation: Impact on Local Residential Property Values. *Journal of Environmental Assessment Policy and Management, 19(1),* https://www.worldscientific.com/doi/pdf/10.1142/S1464333217500132.

Chemical Facility Safety

EPA plays a valuable role in working with states and communities to build capacity to prevent, prepare for, and respond to emergencies at chemical facilities. The program establishes a structure for federal, state, local, and tribal partners to work together with industry to protect emergency responders, local communities, and property from chemical risks through advanced technologies, community engagement, and improved safety systems. In FY 2021, the program will prioritize inspection of facilities required to have a Risk Management Plan (RMP) to ensure compliance with accident prevention and preparedness activities. In FY 2021, EPA requests $10.9 million for the State and Local Prevention and Preparedness Program.

State and Local Prevention and Preparedness Fee Proposal

In FY 2021, EPA continues to propose new fee authority in the State and Local Prevention and Preparedness Program to better support compliance assistance work for RMP facilities. Once authorized, the new voluntary fee and service would provide support for facilities in complying with EPA regulations. Authorizing language for the new fee collection accompanies the FY 2021 Budget submission.

RCRA Waste Management

Approximately 60,000 facilities generate and safely manage hazardous waste in the United States. While states have primary responsibility for efforts related to permitting hazardous waste units (such as incinerators and landfills), 80 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.[26]

In FY 2021, permits for these activities will be issued, updated, or maintained as necessary. EPA will continue to directly implement the entire RCRA program in two states and provides leadership, work-sharing, and support to the states and territories authorized to implement the permitting program. In addition, EPA will review and approve polychlorinated biphenyls (PCB) cleanup, storage, and disposal activities as this federal authority is not delegable to state programs.

The FY 2021 Budget includes $0.7 million, including 1 FTE, for RCRA Waste Management as part of a broader EPA effort to reduce sources of ocean pollution, particularly plastics, as part of the sharing of waste management approaches and technical assistance with select developing countries and vulnerable communities. In total, the FY 2021 Budget provides $50.4 million to the RCRA Waste Management program.

Recycling and Food Waste

In FY 2021, EPA will focus on the priority areas of improving the U.S. recycling system and preventing food waste and loss. Activities will include performing a needs assessment of the U.S. recycling industry to inform future work for EPA's and/or other agencies' supporting efforts to

[26] 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.

maintain a sustainable and resilient recycling industry. Different definitions and recycling rate methodologies across the country create challenges to setting goals and tracking progress. EPA will develop and report new metrics for evaluating recycling system performance. EPA also will administer two grant programs: The Community Recycling Infrastructure and Capacity Building Grant for state and local governments to build and enhance recycling capacity and infrastructure around the country and the Local Government and Non-governmental Organization (NGO) Food Waste Campaign Strategy Grant to study effective food waste management campaigns and to assist local entities with educating the public about recycling and organics management. Finally, EPA will support a pilot innovation incentive program to encourage the creation of products made with recycled content and increased the use of recycled materials in manufacturing. To support these efforts, the FY 2021 Budget includes $4.2 million with 5.0 FTE for the RCRA Waste Minimization and Recycling program.

Hazardous Waste Electronic Manifest

On October 5, 2012, the Hazardous Waste Electronic Manifest Establishment Act was enacted, requiring EPA to develop and maintain a hazardous waste electronic manifest system. The system is designed to, among other functions, assemble and maintain the information contained in the estimated two million manifest forms accompanying hazardous waste shipments across the Nation annually. On June 30, 2018, EPA launched the e-Manifest system, giving generators, transporters, and receiving facilities the option of using electronic manifests. The e-Manifest system improves knowledge of waste generation and final disposition, enhances access to manifest information, and provides greater transparency for the public about hazardous waste shipments. From the e-Manifest Program launch through November 2019, EPA has received over 2,600,000 manifests and collected $19.2 million in 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.[27] In FY 2021, EPA will operate the e-Manifest system and the Agency will continue to collect and utilize fees for the full costs of operation of the system and necessary program expenses. EPA will no longer accept mailed paper manifests after June 30, 2021. To ensure a seamless transition to the e-Manifest system, EPA will continue to engage industry users through regular webinars and targeted demonstrations on how to use the e-Manifest system in FY 2021. In addition, EPA will continue to work with individual generators and associated groups to increase their registration and use of the e-Manifest system, which will allow for greater electronic adoption.

Oil Spill Prevention Preparedness and Response

Inland oil spills can threaten human health, cause severe environmental damage, and create financial loss to industry and the public. The Oil Spill program helps protect the American people by effectively preventing, preparing for, responding to, and monitoring inland oil spills. EPA serves as the lead responder for cleanup of all inland zone spills, including transportation-related spills, and provides technical assistance and support to the U.S. Coast Guard for coastal and maritime oil spills. In FY 2021, EPA requests a total of $13.0 million for the Oil Spill Prevention, Preparedness and Response Program to continue to ensure compliance with preventative measures

[27]Details can be found at: https://www.epa.gov/e-manifest/learn-about-hazardous-waste-electronic-manifest-system-e-manifest.

through inspections, deliver required annual oil spill inspector training to federal and state inspectors, and maintain the National Oil Database and National Contingency Plan product schedule.

Oil Spill Prevention, Preparedness and Response Fee Proposal

In FY 2021, EPA continues to propose a new fee authority in the Oil Spill Prevention, Preparedness, and Response Program to better support compliance assistance work for Facility Response Plan (FRP) and Spill Prevention Control and Countermeasure (SPCC) facilities. Once authorized, the new voluntary fee and service would provide support for facilities in complying with EPA regulations.

Homeland Security

Terrorist attacks, industrial accidents, and natural disasters can result in acutely toxic chemical, biological, radiological, or nuclear (CBRN) contamination causing sickness or death, disruption of drinking water and wastewater services, economic hardship in communities, and even shutdown of urban areas. EPA's Homeland Security work is an important component of the Agency's prevention, protection, and response activities. The FY 2021 Budget includes $32.0 million to maintain Agency capability to respond to incidents that may involve harmful CBRN substances. Resources will allow the Agency to develop and maintain expertise and operational readiness to respond to emergencies. Funding of $1.5 million also is included to begin formally planning for the next generation of mobile lab detection and to fund a www.challenge.gov initiative to crowdsource innovative ideas for creative technology concepts that could replace current technology.

Objective 4: Ensure Safety of Chemicals in the Marketplace. **Effectively implement the Toxic Substances Control Act (TSCA), and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 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.**

Objective 1.4, Ensure Safety of Chemicals in the Marketplace, directly supports the following long-term performance goals in the *FY 2018-2022 EPA Strategic Plan*:

- By September 30, 2022, complete all EPA-initiated TSCA risk evaluations for existing chemicals in accordance with statutory timelines.[28]

- By September 30, 2022, complete all TSCA risk management actions for existing chemicals in accordance with statutory timelines.[29]

- By September 30, 2022, complete all TSCA pre-manufacture notice final determinations in accordance with statutory timelines.[30]

[28] There is no baseline for this measure, as the program is operating under new statutory authority.
[29] There is no baseline for this measure, as the program is operating under new statutory authority.
[30] Baseline is 58.4 percent of determinations made within 90 days in FY 2018. (Footnote updated from *FY 2018-2022 EPA Strategic Plan* published February 12, 2018.)

- By September 30, 2022, complete all cases of Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)-mandated decisions for the pesticides registration review program.[31]

- By September 30, 2022, reduce the Pesticide Registration Improvement Act (PRIA) registration decision timeframe by an average of 60 days.[32]

Chemicals and pesticides released into the environment as a result of their manufacture, processing, use, or disposal can threaten human health and the environment. To address this threat, EPA gathers and assesses information about the risks associated with pesticides and other chemicals and implements risk management strategies when needed. EPA's research efforts will help advance the Agency's ability to assess chemicals more rapidly and accurately.

In FY 2021, EPA requests $243.4 million and 1,083.5 FTE for this strategic objective. Highlights include:

Toxic Substances Control Act (TSCA)

In 2016, TSCA was amended by enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act. This amendment gave EPA significant new, as well as continuing, responsibilities for ensuring that chemicals in or entering commerce do not present unreasonable risks to human health and the environment, including potentially exposed or susceptible subpopulations. EPA works to ensure the safety of: (1) *existing chemicals* (those already in use when TSCA was enacted in 1976 and those which have gone through the TSCA new chemical review since then), by obtaining and evaluating chemical data and taking regulatory action, where appropriate, to prevent any unreasonable risk posed by their use; and (2) *new chemicals*, by reviewing and taking action on new chemical notices submitted by industry, including Pre-Manufacture Notices, to ensure that no unreasonable risk will be posed by such chemicals upon their entry into U.S. commerce.

EPA made considerable progress towards meeting the FY 2018-2019 APG for TSCA risk management actions and TSCA risk evaluations with key milestones achieved or in progress as of the end of FY 2019.[33] The Agency expects to complete risk evaluations under amended TSCA for the initial set of ten chemicals in FY 2020. Substantial progress has already been made, with the publication of scoping documents for these evaluations on schedule in June 2017, followed by the completion of problem formulation documents in June 2018. EPA has released draft risk evaluations for seven of the 10 chemicals (as of January 2020) for public comment and peer review. In addition, the Agency recently granted a manufacturer request to undertake risk evaluations for two chemicals used in plastic production, Diisodecyl Phthalate (DIDP) and Diisononyl Phthalate (DINP). In FY 2020, EPA will publish scoping documents for risk evaluations for 20 High-Priority Chemicals designated in December 2019. Going forward, the

[31] Baseline is 239 decisions completed by the close of FY 2017 out of the known universe of 725. (Footnote updated from *FY 2018-2022 EPA Strategic Plan* published February 12, 2018.)
[32] 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.
[33] More details can be found at: https://www.performance.gov/EPA/APG_epa_6.html.

Agency will maintain 20 EPA-initiated evaluations on an on-going basis.[34] The Agency has identified 20 Low-Priority Chemicals which will not undergo risk evaluation. In FY 2021, EPA will work to develop drafts of the 20 new risk evaluations, commence associated peer reviews, and develop risk management actions to address any unreasonable risks identified in the risk evaluations for the first 10 chemicals to be completed in FY 2020. In FY 2021, as required by statute, EPA also will promulgate five rules to address risks associated with five Persistent, Bioaccumulative and Toxic chemicals referenced in amended TSCA. A proposed rule was issued in June 2019.[35]

Although substantially improved from FY 2018, the performance rate of FY 2019 TSCA pre-manufacture notice (PMN) final determinations completed within 90 days was 78 percent, slightly below the 80 percent target for both the FY 2018-2019 APG and FY 2019 annual performance goal. Contributing factors included frequent submitter requests for suspensions of review, increased complexity of the review process under amended TSCA, and continuing need for recruitment and training of new staff. Given the positive year-over-year trend, EPA expects to meet the long-term performance goal to complete all PMN final determinations within 90 days by FY 2022. EPA expects continued improvement by applying findings from the Lean assessments completed in FY 2018 and FY 2019, introducing further information technology enhancements, and bringing additional staff on board. The Agency continues to meet 100 percent of final TSCA new chemical determinations within the full timeframes allowable by statute (including statutorily-allowable extensions).

In FY 2021, TSCA resources also will be used to support the FY 2020-2021 APG on reducing childhood lead exposures and associated health impacts, including maintaining an adequate supply of trained and certified lead-based paint professionals. By September 30, 2021, EPA will increase the recertification rate of lead-based paint renovation, repair, and painting firms to 28 percent from a baseline of 23 percent. EPA will strive to increase the recertification rate through outreach to industry and will continue to publish an updated list of certified renovation firms on the agency's website.[36]

In FY 2021, EPA will support its chemical safety work through a combination of $69.0 million in requested appropriated resources and revenue from TSCA user fees.

Promote Children's Environmental Health

Following the Administrator's FY 2019 reaffirmation of EPA's Policy on Evaluating Health Risks to Children to address their unique vulnerabilities, the Office of Children's Health Protection (OCHP) has provided assistance and information to EPA program offices to support actions under TSCA, FPQA, SDWA and other statutes.[37] In FY 2019, the Children's Health Protection Advisory Committee (CHPAC) met three times and began work to provide advice on how EPA can better

[34] More details can be found at: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/chemical-substances-undergoing-prioritization-high.
[35] More details can be found at: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/regulation-chemicals-under-section-6a-toxic-substances.
[36] https://cfpub.epa.gov/flpp/pub/index.cfm?do=main.firmSearch.
[37] https://www.epa.gov/sites/production/files/2018-10/documents/childrens_health_policy_reaffirmation_memo.10.11.18.pdf.

communicate risks to children's health to diverse audiences.[38] In response to CHPAC's advice, EPA began working with the National Institute of Environmental Health Services to plan a national workshop focusing on Children's Health and Wildfires to be held in April 2020. The committee was reauthorized and is poised to provide further guidance, with opportunity for public input, to the Agency on topics relevant to the protection of children's environmental health. Overall, EPA reached more than 118,000 stakeholders in FY 2019. These stakeholders included; parents, teachers, health care providers, state, tribal, and local government officials, day care providers, researchers and academia, community-based organizations, industry representatives, and the general public. In FY 2021, EPA will continue to provide advice and assistance to assure appropriate consideration of risks to children at all developmental life stages, from pregnancy through age 21, and to workers of childbearing ages. As EPA engages with stakeholders during FY 2021 to promote children's environmental health, emphasis will be placed on implementing the FY 2020 initiative to address children's environmental health in schools and childcare settings.

Healthy Schools Grant Program

Although EPA provides grant funding to a wide range of initiatives focused on addressing risks to children's health, the Agency has no comprehensive environmental health management program to support school administrators and others in identifying and addressing some of the most common areas of environmental health concerns found in schools. To address this need, the FY 2021 Budget proposes a Healthy Schools Grant Program. This Program is a multi-media grant that provides funding to identify and help prevent, reduce, and resolve environmental hazards and prevent childhood lead poisoning, reduce asthma triggers, promote integrated pest management, and reduce childhood exposure to one or more chemicals in schools, including public and faith-based schools and childcare centers. EPA recognizes that school environmental health challenges differ due to variations in geography, age of school infrastructure, population density, and other factors.

The Healthy Schools Grant Program was designed to protect children and teachers in environments in which they live, play, and work. In FY 2021, EPA requests $50 million to implement this grant program which will target the highest priority efforts to protect human health and the environment in school settings.

Toxics Release Inventory (TRI)

The Toxics Release Inventory (TRI) Program supports EPA's mission, including its chemical safety program, by annually making available to the public data reported by industrial and federal facilities on the quantities of toxic chemicals they release each year to air, water or land, or otherwise manage as waste (e.g., through recycling). These facilities also disclose any pollution prevention practices they implemented during the year. TRI is the Agency's premiere source of data on toxic chemicals release and management for communities, non-governmental organizations, industrial facilities, academia, and government agencies. The data collected by EPA pertain to more than 650 individual toxic chemicals, and more than 30 chemical categories, from over 20,000 industrial and federal facilities. The Agency employs targeted system enhancements

[38] For additional information, refer to: https://www.epa.gov/children/chpac.

to better manage information flows and scientific tools and models. EPA's FY 2021 budget proposal includes $8.1 million to continue to advance the work of this program.

Pesticides

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) is the primary federal law governing oversight of pesticide manufacture, distribution, and use in the United States. FIFRA requires EPA to register pesticides based on a finding that they will not cause unreasonable adverse effects on people and the environment. The finding must consider the economic, social, and environmental costs and benefits of the uses of the pesticides. Each time the law has been amended, Congress has strengthened FIFRA's safety standards while continuing to require consideration of pesticide benefits.

Every 15 years, EPA reevaluates previously registered pesticides to ensure they meet current standards. EPA's Pesticides Program remains on track to meet the statutory completion date for this 15-year Registration Review period, which is October 1, 2022. As of the end of FY 2019, 383 final decisions of a known universe of 725 cases were completed and 549 draft risk assessments of a known universe of 725 cases were completed. Through the Pesticide Registration Improvement Act (PRIA), the Program continues to ensure new products meet U.S. safety standards, expediting the licensing of new products so they are available in the marketplace for use in agricultural, consumer, and public health pest control needs.

In addition to FIFRA, the Federal Food, Drug, and Cosmetic Act (FFDCA) governs the maximum allowable level of pesticides in and on food grown and sold in the United States. The legal level of a pesticide residue on a food or food item is referred to as a tolerance. FFDCA requires that the establishment, modification, or revocation of tolerances be based on a finding of a "reasonable certainty of no harm." Whereas FIFRA is a risk-based statute that allows for consideration of the benefits of pesticide use in determining whether to register a pesticide, FFDCA is a risk-only statute, and benefits cannot be used in determining whether the tolerance meets the safety standard. When evaluating the establishment, modification, or revocation of a tolerance, EPA seeks to harmonize the tolerance with the maximum residue levels set by other countries to enhance the trade of agricultural commodities.

EPA's Pesticide Licensing Program evaluates new pesticides before they reach the market and ensures that pesticides already in commerce are safe when used in accordance with the label as directed by FIFRA, FFDCA, and the Food Quality Protection Act. EPA is responsible for licensing (registering) new pesticides and periodically reevaluating (registration review) older pesticides to protect consumers, pesticide users, workers who may be exposed to pesticides, children, and other sensitive populations, while considering the benefits associated with the use of the pesticide.

In FY 2021, $95.1 million in appropriated funds is requested to support EPA's Pesticide Registration Review and Registration programs. Identifying, assessing, and reducing the risks presented by the pesticides on which our society and economy relies is integral to ensuring environmental and human safety. Chemical and biological pesticides help meet national and global demands for food. They provide effective pest control for homes, schools, gardens, highways, hospitals, and drinking water treatment facilities, while also controlling vectors of disease. The

Pesticides Program ensures that the pesticides available in the U.S. are safe when used as directed. The Program places priority on reduced-risk pesticides that, once registered, will result in increased societal benefits. In FY 2021, appropriated funding will be augmented by approximately $49.8 million in pesticides registration and maintenance user fees, as authority to collect fees is provided through FY 2023 by the Pesticide Registration Improvement Extension Act of 2018 (PRIA 4).

In FY 2021, EPA will continue to review and register new pesticides, new uses for existing pesticides, and other registration requests in accordance with all statutory requirements. In addition, the Agency will review, under the Pesticides Registration Review Program, pesticides already in the market against current scientific standards for human health. The Agency has been working on reducing the average number of days to complete PRIA decisions for new active ingredients; however, in FY 2019 performance fell short of the annual target for reducing PRIA registration decision timeframes. In FY 2019, EPA took an average of 686 days to complete PRIA decisions, 55 days above the target of 631. Contributing factors that added time included: (1) three of the 14 completions had longer statutory timeframes; (2) the total number of new active ingredient completions in FY 2019 was somewhat lower than normal; and (3) 12 of the 14 completions required renegotiation of the PRIA due date. Reasons for the renegotiation of the PRIA due date in FY 2019 included: deficient applications; additional studies required; risk mitigation issues; public participation process; and the Federal Register Notice publication process. To bring results back in alignment with annual targets towards the long-term performance goal, EPA will take steps to support improvements to the new active ingredient review process. Additionally, the ongoing IT-modernization effort whereby EPA will be moving to an entirely electronic pesticide review process is expected to result in efficiencies that would reduce the average registration decision timeframe for new active ingredients.

The Agency will continue to invest resources to improve the compliance of pesticide registrations with the Endangered Species Act (ESA), including continuing its leadership of the FIFRA-ESA Interagency Working Group formed as part of the 2018 Farm Bill. Funding will ensure that pesticides are correctly registered and applied in a manner that protects water quality. EPA will continue registration and registration review requirements for antimicrobial, biopesticide, and conventional pesticides. Additionally, the Pesticides Program continues to focus on pollinator health, working with other federal partners, states, and private stakeholder groups to stem pollinator declines and increase pollinator habitat.

The Agency's worker protection, certification, and training programs will encourage safe pesticide application practices. The Certification of Pesticide Applicators regulation requires states, tribes, and Federal Agencies to submit to EPA by March 4, 2020, revised certification plans to continue to administer applicator certification programs in their jurisdictions. In FY 2021, EPA will review more than 50 state, tribal, and Federal Agency certification plans for approval. These updated plans will strengthen the baseline for applicator certification standards across the country. EPA also will continue to provide training to state regulators and inspectors and regions on the revised regulations to ensure accurate implementation and protection of America's workforce.

Through the Pesticides Program implementation, EPA also will continue outreach and training to healthcare providers in the recognition and management of pesticide-related illnesses. The

outreach focuses on efforts to train clinicians serving the migrant and seasonal farmworker community, further improving the treatment of agricultural workers and communities potentially exposed to pesticides. EPA will continue to emphasize reducing exposures from pesticides used in and around homes, schools, and other public areas. Together, these activities and programs will minimize exposure to pesticides, maintain a safe and affordable food supply, address public health issues, and minimize property damage that can occur from insects, pests, and microbes.

More Effective Partnerships

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.

Strategic Objectives:

- Improve environmental protection through shared governance and enhanced collaboration with state, tribal, local, and federal partners using the full range of compliance assurance tools.

- Listen to and collaborate with impacted stakeholders and provide effective platforms for public participation and meaningful engagement.

GOAL, OBJECTIVE SUMMARY

Budget Authority
Full-time Equivalents
(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
More Effective Partnerships	**$318,487.7**	**$323,893.0**	**$243,870.0**	**-$80,023.0**
Enhance Shared Accountability	$304,194.9	$305,126.0	$241,141.0	-$63,985.0
Increase Transparency and Public Participation	$14,292.8	$18,767.0	$2,729.0	-$16,038.0
Total Authorized Workyears	1,045.7	1,049.6	855.5	-194.1

Goal 2: 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.

Introduction

The intent that environmental and human health protection is a shared responsibility between the states, tribes, and the Federal Government is embedded in our environmental laws. Thus, EPA's strategic goal of more effective partnerships is vital to advancing the Agency's mission. EPA is focused on providing certainty to the American people, our co-regulators, and the regulated community. EPA attention is in three primary areas: certainty to the states and local governments, including tribes; certainty within EPA programs, such as permitting and enforcement actions; and certainty in risk communication.

Nearly 50 years after the creation of EPA and the enactment of a broad set of federal environmental protection laws, most states, and to a lesser extent territories and tribes, are authorized to implement EPA-administered environmental programs within their jurisdictions. Most of the major environmental statutes provide states and tribes the opportunity and responsibility for implementing and sustaining environmental and human health protection programs. Indeed, states have assumed more than 96 percent of the delegable authorities under federal law.[39]

Through shared governance, the Agency will work with state and tribal partners to streamline processes and provide accessible, reliable information and data that benefits co-regulators and the regulated community. EPA will continue to adapt its practices to reduce duplication of effort with authorized states, tribes, and territories, and tailor its oversight of delegated programs.

EPA works to protect human health and the environment of federally recognized tribes by supporting implementation of federal environmental laws, with a special emphasis on helping tribes administer their own environmental programs. These efforts are consistent with the federal trust responsibility, the government-to-government relationship, and EPA's 1984 Indian Policy. As of September 30, 2019, EPA has completed 470 EPA-Tribal Environmental Plans (ETEPs). The purpose of these, and additional ETEPs under development, is to increase shared governance through joint planning that informs decisions on financial and technical assistance for environmental programs. EPA will monitor regional actions to implement ETEPs as part of its business review process. The Agency will continue to give special consideration to tribal interests in making Agency policy, and to ensure the close involvement of tribal governments in making decisions and managing environmental programs affecting reservation lands. Since 2011, EPA has completed over 500 Tribal Consultations, an important Agency milestone under the EPA Tribal Consultation Policy. EPA completed 64 tribal consultations in FY 2019.

EPA retains responsibility for directly implementing federal environmental programs in much of Indian Country where eligible tribes have not yet built capacity to take on program responsibility. There also are programs which may not be delegated by statute to the states, tribes or territories,

[39] Environmental Council of the States Paper, "Cooperative Federalism 2.0," June 2017.

and programs which are delegable, but for which the state, tribe or territory has not sought delegation. Taking a renewed look at such programs will facilitate constructive dialogue with states and tribes to ensure maximum utilization of resources.

The relationship between states, tribes, territories, and EPA is not just about who makes decisions, but also how decisions are made and affirming and respecting the sense of shared accountability to provide improvements to protecting human health and the environment which cannot be achieved by any single actor. Success is derived when the states, tribes, territories, and EPA, in conjunction with affected communities, work together in a spirit of trust, collaboration, and partnership. In FY 2021, EPA will continue to strengthen its community-driven approach through grants, technical assistance, and partnering directly with communities. The Agency will deploy its resources and expertise to collaborate with states, tribes, and communities to achieve a more comprehensive understanding of needs and support locally led, community-driven solutions to improved environmental protection and economic growth through competition of EPA's Environmental Justice (EJ) Small Grants.

In FY 2021, EPA will continue to strengthen its implementation of the Freedom of Information Act (FOIA) to promote transparency and build public trust in Agency actions. EPA will enhance its efforts to eliminate the FOIA backlog and meet statutory deadlines for responding to FOIA requests by September 30, 2022, EPA's long-term performance goal. In FY 2019, EPA developed new initiatives to enhance EPA's FOIA program and reduced its FOIA request backlog by 16 percent from the April 2018 baseline. EPA also reduced its FOIA appeals backlog by 51.5 percent, reversing a two-year trend of increases in both backlogs. With FOIA, community consultations and other public participation opportunities, the beneficiaries of environmental protection – the American people – will be able to more meaningfully engage through their communities, local governments, and state and tribal governments. As the Agency's statutory responsibilities are implemented, including the public's voice in EPA's policy, regulatory, and assistance work is essential to meeting the needs of the American people.

FY 2021 Activities

Objective 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.**

Objective 2.1, Enhance Shared Accountability, directly supports the following long-term performance goals in the *FY 2018-2022 EPA Strategic Plan*:

- By September 30, 2022, increase the number of grant commitments achieved by states, tribes, and local communities.[40]

[40] Universe (number of grant commitments) and FY 2021 target will be determined in FY 2020. (Footnote updated from *FY 2018-2022 EPA Strategic Plan* published February 12, 2018.)

- By September 30, 2022, increase the use of alternative shared governance approaches to address state, tribal, and local community reviews.[41]

In part through the Agency's grants and cooperative agreements, EPA and its partners have made and will continue to make enormous progress in protecting air, water, and land resources. In FY 2019, EPA analyzed grant performance tracking at the headquarters and regional levels, and is working with program offices to pilot a streamlined method to capture grantees' progress toward meeting the commitments established in grant and cooperative agreement workplans. EPA recognizes states and tribes vary in the environmental challenges they face due to geography, population density, and other factors. The unique relationship among EPA and its co-regulators is the foundation of the Nation's environmental protection system and each partner fulfills a critical role based on its expertise, capacity, and responsibilities to protect and improve human health and the environment. Recognizing this, EPA will maximize the flexibilities provided by law to accommodate each state's and tribe's unique situation when making regulatory and policy decisions. The FY 2021 Budget includes funding for the Multipurpose Grants, which are an example of a commitment to more effective partnerships. These grants afford flexibility to the Agency's state and tribal partners by allowing them to target funds toward their highest priority mandatory statutory duties to protect human health and the environment.

EPA recognizes the advances states and tribes have made in implementing environmental laws and programs. EPA is undertaking a series of initiatives to rethink and reassess the Agency's current and future position with respect to shared governance. These initiatives are working to clarify the Agency's statutory roles and responsibilities, and tailoring state and tribal oversight to maximize our return on investment, reduce the burden on states and tribes, and ensure continued progress in achieving environmental outcomes. To advance this progress, the Agency will work to provide more certainty to the states and tribes. For example, the Clean Water Act (CWA) lays out the process by which EPA can authorize states and tribes to perform many of the permitting and enforcement aspects of the National Pollutant Discharge Elimination System (NPDES) program. EPA's recent approval of Idaho's NPDES program is an example of EPA developing effective partnerships that provide states with greater responsibility and control of permitting discharges to waters.

The Agency will continue to work closely with our state and tribal partners to ensure our mutual responsibilities under the law are fulfilled. As one example, permitting issues can heavily impact small and mid-sized businesses, the backbone of the American economy. We are systematically tracking the time it takes to issue permits to reduce unnecessary burden. The Agency's long-term performance goal is to reach all permitting-related decisions within six months for CWA NPDES, Underground Injection Control, Polychlorinated Biphenyls (PCBs), and Resource Conservation and Recovery Act permits. Clean Air Act (CAA) permits are subject to timeframes described in the statute for permit issuance (12 months and 18 months, respectively, for NSR and Title V permits).

[41] There is no baseline for this measure. (Footnote updated from *FY 2018-2022 EPA Strategic Plan* published February 12, 2018.)

In FY 2021, $44.2 million is included for the Tribal General Assistance Program Grants, which will continue to assist tribal governments in developing environmental protection program capacity to assess environmental conditions, use relevant environmental information to improve long-range strategic environmental program development planning, and develop environmental programs tailored to tribal government needs consistent with those long-range strategic plans. EPA directly implements the majority of federal environmental programs in Indian Country. Therefore, the Agency works with tribes to develop their capacity to administer environmental programs enabling participating tribes the ability to implement federal environmental laws and programs. Consistent with the 1984 Indian Policy and EPA policies on consultation, the Agency works on a government-to-government basis to build tribal capacity to participate with EPA in direct implementation activities, and implement federal programs through delegations, authorizations, and primacy designations. This enables tribes to meaningfully participate in the Agency's policy making, standard setting, and direct implementation activities under federal environmental statutes.

In FY 2021, EPA requests a total of $241.1 million and 851.5 FTE to enhance EPA's shared accountability and build more effective partnerships. Highlights include:

Shared Governance

In FY 2021, the Agency will focus on core statutory roles and responsibilities to better develop a future model of shared governance. This means engaging early and meaningfully with states and tribes and taking into account the progress they have made in protecting human health and the environment. The Agency will use shared governance to work with states and tribes to increase flexibility and to streamline oversight of state and tribal environmental programs. In FY 2019, EPA coordinated with states and tribes to develop a principles memo[42], outlining key tenets of shared governance. The Agency also piloted the application of this memo using program-specific templates for reviews conducted as part of the CWA NPDES and Clean Air Act Title V operating permit programs. After seeking feedback from state partners, EPA implemented the process in all 10 regional offices and will use this process in FY 2021.

EPA continues to work with its co-regulators to identify additional areas of focus. This includes working to streamline and improve processes where EPA must review and approve state and tribal actions (e.g., permit reviews, Quality Assurance Project Plans). E-Enterprise for the Environment provides a shared governance forum where states, tribes and EPA work together to streamline processes and leverage technology with the goal to provide accessible, reliable information and data. Furthermore, states, tribes and EPA use E-Enterprise to deliver better results, often with lower costs and less burden for the benefit of the public, the regulated community, and government agencies.

The Agency actively works with tribes to develop their capacity to administer environmental programs for their lands. As of September 30, 2019, EPA has completed 470 ETEPs, which continues a long-standing commitment to cooperative EPA-tribal environmental planning. EPA will monitor regional actions to implement ETEPs as part of its business review process. EPA's

[42] https://www.epa.gov/sites/production/files/2019-04/documents/fep_oversight_memo.10.30.18.pdf.

work in FY 2021 will continue to enhance EPA-Tribal partnerships through development and use of ETEPs that support tribal implementation of federal environmental laws and a continued focus on tracking and reporting measurable results of Indian Environmental General Assistance Program (GAP)-funded activities.

EPA, with its state, tribal, and local partners, ensures consistent and fair enforcement of federal environmental laws and regulations. In July 2019, EPA's Office of Enforcement and Compliance Assurance issued a policy titled "Enhancing Effective Partnerships Between the EPA and the States in Civil Enforcement and Compliance Assurance Work"[43] to create more effective partnerships with states, localities, and federally-recognized Indian tribes. This policy sets out expectations and procedures for enhancing effective partnerships in civil enforcement and compliance assurance work between EPA and states that are implementing federal environmental programs. EPA will strive to follow these planning and communication practices when working with federally-recognized Indian tribes, territories, and local governments that have received approval to implement federal programs. In collaboration with co-regulators, the Agency uses a full set of compliance assurance tools, such as compliance assistance and monitoring, electronic reporting, traditional enforcement, grant funding to states and tribes, and building tribal capacity. EPA, states, and tribes work together to develop and deliver better results, often with lower costs and less burden for the benefit of the public, the regulated community, and governmental sectors.

Compliance Assurance

As part of its role of assuring compliance with environmental laws, the Agency will continue to look for cost-effective ways to enhance the compliance assurance toolbox in collaboration with its state, tribal, local, federal, and industry partners. For example, the E-Enterprise Web Portal offers a platform or gateway of services available to states, tribes, and EPA to conduct and accomplish our work. These tools and services are designed to enhance efficiency, reduce burden on the regulated community, and improve environmental outcomes. In general, an expanded and modernized compliance assurance toolbox will enhance EPA's ability to tailor compliance assurance approaches to the differing needs and challenges among authorized states, territories, tribes, and regulated entities. EPA continues to work closely with authorized states, tribes, and territories to develop new compliance tools and approaches in order to make programs more effective and efficient in promoting compliance and remedying violations.

A key component of EPA's overall compliance assurance program is compliance monitoring. Compliance monitoring allows the regulatory agencies to detect noncompliance, implement timely and appropriate follow-up actions, and promote compliance with the Nation's environmental laws. Effective targeting of compliance monitoring plays a central role in achieving the goals that EPA has set for protecting human health and the environment. On a national level, EPA works closely with individual states, tribes, and state and tribal associations to develop, modernize, and implement national compliance monitoring and enforcement response strategies. This approach ensures a level playing field exists for regulated entities across the country. For example, in FY 2021, EPA will use circuit riders to provide on-the-ground assistance to help public water systems achieve and sustain compliance. In FY 2021, EPA requests $1.1 million for this program which would include assistance in Indian Country where systems and facilities are often small or isolated.

[43] https://www.epa.gov/sites/production/files/2019-07/documents/memoenhancingeffectivepartnerships.pdf.

Another core element of EPA's compliance assurance program is providing timely and accessible compliance assistance information to the regulated community. EPA will continue to partner with third-party organizations and other federal agencies to support the existing web-based, sector-specific compliance assistance centers[44] and other web-based assistance resources. In FY 2021, EPA, state, and tribal inspectors will continue to use the inspection process as an opportunity to provide regulated entities with relevant compliance assistance information.

EPA principally focuses compliance monitoring activities on those programs not currently delegated or delegable to states and tribes, and in delegated or authorized state programs where the state lacks the equipment, resources, or expertise to take appropriate action to protect public health and the environment. Compliance monitoring activities include field inspections, electronic reporting, data analysis tools, and where appropriate, follow-up enforcement actions. In FY 2019, EPA exceeded its compliance monitoring target (of 10,000) inspections and evaluations by conducting 10,300 compliance monitoring activities, which included on-site inspections and some off-site compliance monitoring. The Agency will continue to provide monitoring, program evaluations, and capacity building to support and complement authorized state, tribal, territorial and local government programs. The Agency works collaboratively with states in resolving noncompliance at federal facilities, especially states lacking enforcement authorities or the capacity to address these issues. In FY 2021, EPA will increase the environmental law compliance rate by reducing the percentage of CWA NPDES permittees in significant noncompliance (SNC) with their permit limits to 18.4 percent. In addition, the Agency will continue to implement Phase 2 of the NPDES Electronic Reporting Rule which covers the e-reporting rule permitting and compliance monitoring requirements for EPA and states.

In FY 2021, EPA requests $96.7 million and 427.7 FTE to fund EPA's compliance monitoring activities.

International Partnerships

To achieve the Agency's domestic environmental and human health objectives, the EPA will work with international partners to address international sources of pollution that impact the United States or our foreign policy objectives. International sources of pollution impact air, water, food crops, and food chains, and can accumulate in foods such as fish. EPA will work with international partners to strengthen environmental laws and governance to more closely align with U.S. standards and practices of U.S. industry. The FY 2021 Budget includes $10.6 million to support these efforts through the International Sources of Pollution program, including $3.1 million and 3.0 FTE to support multilateral and bilateral efforts to reduce ocean pollution and plastic, an increasingly prominent global issue that can negatively impact domestic water quality, tourism, industry, and public health. The Budget also includes resources to support implementation of the Environment Chapter of the US-Mexico-Canada (USMCA) trade agreement. In addition, in FY 2021, $0.7 million, including 0.5 FTE, is allocated to support EPA's cooperation on food waste reduction methodologies, and to identify U.S. best practices and technologies that can reduce food waste with international partners.

[44] For more information on compliance assistance centers, see https://www.epa.gov/compliance/compliance-assistance-centers.

***Objective 2: Increase Transparency and Public Participation*. Listen to and collaborate with impacted stakeholders and provide effective platforms for public participation and meaningful engagement.**

Objective 2.2, Increase Transparency and Public Participation, directly supports the following long-term performance goal in the *FY 2018-2022 EPA Strategic Plan*:

- By September 30, 2022, eliminate the backlog and meet statutory deadlines for responding to Freedom of Information Act (FOIA) requests.[45]

In FY 2021, EPA will continue to strengthen its community-driven approach, which emphasizes public participation in partnering with states, tribes, and communities. In FY 2021, EPA requests $2.7 million and 4.0 FTE to support this strategic objective.

EPA will meet community needs through more meaningful engagement and public participation, and by building community capacity through grants, technical assistance, and partnering directly with communities. Increasing transparency and public participation in EPA's work, especially at the early stages of Agency actions, will enhance the Agency's ability to partner with states, tribes, and local governments and increase responsiveness to the needs of the most vulnerable communities.

EPA's competitive Environmental Justice (EJ) Small Grants will support locally led, community-driven solutions to improve environmental protection and economic growth. In 2019, EPA's EJ grant projects directly trained, educated, and engaged over 12,000 community residents in grant activities addressing disproportionate issues specific to their communities. In FY 2019, EPA implemented a series of training webinars focused on integrating environmental justice at the state level. Over 4,000 individuals registered for this webinar series with representatives from all fifty states, Washington D.C., and Puerto Rico, and which included state environmental, public health, planning, and transportation agencies. EPA plans to offer additional trainings in FY 2021.

In FY 2021, EPA will continue to use the Environmental Justice and Community Revitalization Council (EJCRC) as the central decision making and leadership body for environmental justice and community revitalization programs' strategic priorities and guiding implementation. The EJCRC has made Community-Driven Solutions a priority to engage with vulnerable communities and meet their needs through enhanced coordination across EPA programs and external partners. Community-Driven Solutions also is the platform that supports the Agency's Opportunity Zone work.

Environmental Justice and Interagency Coordination

In FY 2021, the Agency will enhance coordination across its programs and with federal partners to ensure alignment of mutual efforts, including consideration of vulnerable groups and communities when making decisions. EPA will leverage resources with new and existing partners to deliver services efficiently and effectively. In FY 2019, the Agency launched a new program

[45] 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.)

with the USDA Forest Service and Northern Border Regional Commission, called the Recreation Economy for Rural Communities, which is modeled after the highly successful interagency programs, Local Foods, Local Places and Healthy Places for Healthy People. The Agency will continue these partnerships in FY 2021, focusing on economically distressed communities and Opportunity Zones.

The Agency also will leverage recommendations provided by federal advisory committees, such as the National Environmental Justice Advisory Council (NEJAC), the Local Government Advisory Council, and the Children's Health Protection Advisory Committee. The focus will be on partnerships representing vulnerable populations, such as youth, elderly, minority, tribal, and low-income communities. In FY 2019, working with EPA, the NEJAC formed a working group to make recommendations that will enhance the effectiveness and efficiencies of Superfund cleanups and help to revitalize local communities. In FY 2019, the NEJAC Superfund Working Group successfully completed a draft phase one recommendations report, sharing it with Superfund program leadership. In FY 2021, the NEJAC will finalize and transmit these recommendations. In 2019, EPA collaborated with other federal agencies to provide direct technical assistance workshops to economically distressed communities. These workshops supported community-driven solutions to environmental challenges and economic decline in more than 60 communities and will be expanded to more communities in FY 2021.

In FY 2021, the Agency will continue its leadership and involvement in the White House Opportunity and Revitalization Council. EPA will coordinate with other agencies to develop and disseminate new and existing tools and resources to support distressed communities. In 2019, half of all EJ grants awarded by EPA were for projects located within or impacting Opportunity Zones. The work of the Council will strengthen coordination with the Interagency Working Group on Environmental Justice (EJ IWG) to better integrate EPA priorities and support and engage vulnerable and environmentally overburdened communities.

In FY 2021, the EJIWG will focus on implementing FY 2019 recommendations from the Government Accountability Office on ways to improve the coordination and integration of environmental justice across the Federal Government. In addition, EPA will support and align its work with the activities and priorities of the President’s Task Force on Environmental Health Risks and Safety Risks to Children. These efforts will help advance an approach to partnerships that are more effective, responsive and collaborative in addressing the needs and challenges of our partners and communities.

Implement the Freedom of Information Act (FOIA)

In FY 2021, EPA will continue to strengthen its implementation of the Freedom of Information Act (FOIA) to promote transparency and build public trust in agency actions, and will enhance its efforts to achieve its long-term performance goal: eliminate the FOIA backlog and meet statutory deadlines for responding to FOIA requests by September 30, 2022.

EPA has made progress in enhancing the FOIA program. In FY 2019, EPA published in the Federal Register an update to its 17-year old FOIA regulations, bringing its regulations into compliance with the 2007, 2009, and 2016 FOIA amendments. The regulation update also centralized FOIA request submissions to EPA’s National FOIA Office, enabling EPA to improve efficiency,

consistency, and quality of its determinations and responses, and to apply best practices in early communications with requesters. Assignments are made rapidly, expedited processing determinations are made more quickly, improper or unclear requests are often identified early, and requesters receive an early, substantive communication from National FOIA Office staff about their requests. In FY 2021, 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 apply Lean management techniques to increase processing speed and will apply new and enhanced 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.

EPA's efforts have yielded substantial results: in FY 2019, EPA reduced its FOIA request backlog by 16 percent from the April 2018 baseline. EPA also reduced its FOIA appeals backlog by 51.5 percent, reversing a two-year trend of increases in both backlogs. In FY 2019, EPA realigned the regional FOIA programs into the Regional Counsel Offices to enhance accountability and streamline organizational structure in EPA's 10 regional offices. This realignment established clear authority and reporting lines through the Regional Counsels to the Agency's General Counsel, the Agency's Chief FOIA Officer following the FY 2018 reorganization. EPA's regions collectively reduced their FOIA request backlog by 22 percent in FY 2019, surpassing the agency-wide 16 percent FY 2019 backlog reduction.

Greater Certainty, Compliance, and Effectiveness

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.

Strategic Objectives:

- Timely enforce environmental laws to increase compliance rates and promote cleanup of contaminated sites through the use of all of EPAs compliance assurance tools, especially enforcement actions to address environmental violations.
- Outline exactly what is expected of the regulated community to ensure good stewardship and positive environmental outcomes.
- Refocus the EPA's robust research and scientific analysis to inform policy making.
- Issue permits more quickly and modernize our permitting and reporting systems.
- Provide proper leadership and internal operations management to ensure that the Agency is fulfilling its mission.

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

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Greater Certainty, Compliance, and Effectiveness	**$1,862,694.6**	**$1,881,689.0**	**$1,726,973.0**	**-$154,716.0**
Compliance with the Law	$376,247.0	$404,452.0	$403,902.0	-$550.0
Create Consistency and Certainty	$67,976.7	$64,426.0	$71,228.0	$6,802.0
Prioritize Robust Science	$466,344.3	$500,029.0	$285,198.0	-$214,831.0
Streamline and Modernize	$38,895.7	$35,996.0	$34,243.0	-$1,753.0
Improve Efficiency and Effectiveness	$913,230.9	$876,786.0	$932,402.0	$55,616.0
Total Authorized Workyears	5,957.1	6,317.2	5,663.5	-653.7

Goal 3: 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.

Introduction

EPA will enforce the rule of law in a timely and consistent manner and take action against those that violate environmental laws to the detriment of human health or the environment. Consistency in how the laws and regulations are applied across the country is important to ensure environmental protection for industries and citizens. EPA recognizes the importance of applying rules and policies consistently as well as creating certainty by meeting the statutory deadlines required for EPA's actions. EPA continues to carry out a broad range of efforts to ensure consistency in the application of laws and regulations, while respecting the unique circumstances of each state and tribe. The rule of law also must be built on the application of robust science that is conducted to help the Agency meet its mission and support the states and tribes in achieving their environmental goals. Research, in conjunction with user-friendly applications needed to apply the science to real-world problems, will help move EPA and the states forward in making timely decisions. In FY 2021, EPA scientists will conduct human health, environmental engineering, and ecological research and translate these into planning and analysis tools for localities throughout the United States to facilitate regulatory compliance and improve environmental and human health outcomes.

Equally important is creating certainty around timing and requirements for routine processes. Achieving this goal requires that EPA improve the efficiency of its internal business and administrative operations. Streamlining EPA's business operations, specifically the permitting processes established by different environmental statutes, is a key to ensuring economic growth, human health, and environmental protection. Between June 2018 and September 2019, EPA reduced the backlog of new permit applications by more than 50 percent (from 149 to 65 applications) through a series of targeted Lean events to improve the efficiency and effectiveness of permitting programs. EPA continues to focus on improving the Agency's business processes to align with the President's Management Agenda. In FY 2021, the Agency will advance the modernization of its information technology systems, help to shift from low to high value work and provide better customer service to its partners and the public to acquire, generate, manage, use, and share information.

In FY 2021, EPA will continue to seek to increase certainty, compliance and effectiveness. To accomplish this, EPA will continue to work cooperatively with states and tribes to ensure compliance with the law, as well as to create consistency and certainty for the regulated community. To ensure a consistent playing field, the Agency will continue to take civil or criminal enforcement action against violators of environmental laws. One example of this is the recent settlement agreement reached between EPA, the Department of Justice, and the State of California with Fiat Chrysler. Fiat Chrysler agreed to pay a $305 million penalty and implemented a recall program at an estimated cost of $185 million for violating the Clean Air Act by installing defeat devices in more than 100,000 vehicles to lessen the effectiveness of the vehicles' emission control systems. This demonstrates how a robust enforcement program is critically important for

addressing violations and promoting deterrence and supports the Agency's mission of protecting human health and the environment. EPA's policies and rules will reflect common sense, in line with the Agency's statutory authorities, and provide greater regulatory and economic certainty for the public.

EPA also will continue the work it began in FY 2019 of implementing the new *Foundations for Evidence-Based Policymaking Ac*t, coordinated by a Central Evaluation Office. Implementation of the Act will enhance strategic planning under the Government Performance and Results Modernization Act (GPRMA). EPA will systematically identify the most important evidence the Agency needs to gather and generate to advance its goals and ensure the Agency uses high quality data and other information to inform policy and decision making. In FY 2021, EPA will develop its first Full Draft Learning Agenda, in coordination with the development of the *FY 2022–FY 2026 EPA Strategic Plan*.

EPA recognizes that meeting the needs of states, tribes, territories, local governments, and communities to achieve environmental improvements cannot be accomplished without consideration of economic growth. The Agency has a responsibility to streamline and reduce unnecessary burdens and to help communities meet their environmental and economic needs. With this understanding, EPA will leverage community revitalization in tandem with environmental protection through targeted investment approaches, such as through Opportunity Zones redevelopment. Opportunity Zones can spur capital investment into redevelopment of economically distressed communities, leading to diversified economies, improved job opportunities, and restored fiscal health in municipalities suffering from disinvestment and environmental challenges.

FY 2020 – 2021 Agency Priority Goals

The Budget highlights EPA's FY 2020-2021 Agency Priority Goals (APGs) that advance EPA priorities and the *FY 2018-2022 EPA Strategic Plan*.[46] One of the six APGs directly supports *Goal 3, Objective 3.4*: *Streamline and Modernize* and is included in the narrative for that objective. Please note that this APG for accelerating permitting-related decisions is agency wide in scope and involves work under Goals 1 and 2.

FY 2021 Activities

Objective 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.**

Objective 3.1, Compliance with the Law, directly supports the following long-term performance goals in the *FY 2018-2022 EPA Strategic Plan*:

[46] For EPA's APG Action Plans and Quarterly Updates, see https://www.performance.gov/EPA/.

- By September 30, 2022, reduce the average time from violation identification to correction.[47]

- By September 30, 2022, increase the environmental law compliance rate.[48]

To carry out its mission to protect human health and the environment, EPA, in collaboration with state and tribal partners, relies on a strong national compliance assurance and enforcement program. An effective enforcement program is key to ensuring the ambitious goals of the Nation's environmental statutes are realized. EPA's enforcement program strives to address noncompliance in an efficient and timely manner, applying a broad range of enforcement and compliance tools to achieve the goal of reducing noncompliance. EPA also seeks to ensure that communities are protected from contaminated sites with its Superfund cleanup enforcement program. By cleaning up hazardous waste sites across the country, ensuring that potentially responsible parties perform and pay for these cleanups, and encouraging third party investment, EPA is reducing human exposure to pollutants and facilitating the reuse of Superfund sites.

EPA aims to enhance its partnerships with its state, local, and tribal co-regulators by more effectively carrying out the Agency's shared responsibilities under environmental laws. EPA is responsible for addressing violations: (1) in programs that are not delegable to a state or a federally-recognized tribe; and (2) where the state or tribe has not been authorized to implement a delegable program. EPA will generally defer to a state as the primary implementer of inspections and enforcement in authorized programs. EPA, however, retains concurrent enforcement authority and there are specific situations where EPA may choose to take direct action after consultation with the authorized state or tribe.[49] EPA has been working to improve the processes associated with enforcement actions to move faster in protecting the environment. In FY 2019, EPA reduced the number of all referred no complaint filed (RNCF) civil judicial cases that are more than 2.5 years old to 94, below the target of 129. In addition, EPA increased the percentage of inspection reports that EPA provides to facilities within 70 days of inspection to 81 percent (from a baseline of 46 percent). EPA also increased documentable EPA administrative enforcement actions/activities producing correction of violations from 74 to 184. These activities serve to increase the speed of correcting violations.

Through the State Review Framework, EPA periodically reviews authorized state compliance monitoring and enforcement programs for Clean Air Act (CAA) Stationary Sources, Resource Conservation and Recovery Act (RCRA) Hazardous Waste, and the Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES). This is done 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

[47] 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.

[48] 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. Other program areas may be included in this long-term performance goal during the FY 2018-2022 timeframe. (Footnote updated from *FY 2018-2022 EPA Strategic Plan* published February 12, 2018.)

[49] For a list of situations that could warrant EPA involvement in an authorized State, please refer to the July 11, 2019 Memo *Enhancing Effective Partnerships Between the EPA and the States in Civil Enforcement and Compliance Assurance Work (*https://www.epa.gov/compliance/memo-enhancing-effective-partnerships-between-epa-and-states-civil-enforcement-and).

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.

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. The Agency works closely with the U.S. Department of Justice and other federal departments, states, tribes, territories, and local agencies to ensure consistent and fair enforcement of environmental statutes. In FY 2021, EPA will continue to strengthen environmental partnerships with states and tribes, encourage regulated entities to correct violations rapidly, ensure that violators do not realize an economic benefit from noncompliance, and pursue enforcement to deter future violations. In FY 2019, EPA increased compliance in the Clean Water Act National Pollutant Discharge Elimination System (NPDES) by reducing the percentage of permittees in significant noncompliance with their permit from 29.4 percent to 25.0 percent. EPA requests $160.8 million and 857.1 FTE for the Civil Enforcement program in FY 2021.

Significant environmental progress has been made over the years, much of it due to enforcement efforts by EPA, states, tribes, and local communities. To maximize EPA's impact, the Agency has refocused enforcement efforts, in support of the *FY 2018-2022 EPA Strategic Plan*, to address significant noncompliance issues and substantial impacts to human health and the environment. EPA recognizes the role of states and tribes as the primary implementers of federal statutes where authorized by EPA; therefore, the Agency will focus compliance assurance and enforcement resources on direct implementation responsibilities, multi-state and national issues, addressing the most significant violations, and assisting authorized states and tribes with technical and scientific support. Providing this compliance assistance helps to ensure a level playing field.

EPA is responsible for direct implementation for 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 non-delegable programs include the Clean Air Act (CAA) mobile source and stratospheric ozone programs, pesticide labeling and registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), virtually all compliance assurance and enforcement in Indian Country, and enforcement of the Federal Superfund cleanup program. Additionally, the enforcement of portions of various other laws, including RCRA, CWA, and stratospheric ozone under CAA are non-delegable. 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 states and tribes with authorized programs.

For FY 2020-FY 2023, the national enforcement and compliance assurance program will be focusing on six National Compliance Initiatives (NCIs), in addition to pursuing EPA's core enforcement work.[50] These six NCIs will advance the *FY 2018-2022 EPA Strategic Plan* objectives to improve air quality, provide for clean and safe water, ensure chemical safety, and improve compliance with the Nation's environmental laws while enhancing shared accountability

[50] *FY 2020- FY 2023 National Compliance Initiatives*(https://www.epa.gov/enforcement/fy2020-fy2023-national-compliance-initiatives.)

between EPA, states, and tribes with authorized environmental programs. While compliance assistance will be a component of each implementation framework, formal enforcement will remain an important tool in the NCIs to address serious noncompliance and create general deterrence.

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 that threaten public health and the environment. EPA collaborates and coordinates with the U.S. Department of Justice, as well as state, tribal, and local law enforcement counterparts to ensure the Agency responds to violations as quickly and effectively as possible. EPA's Criminal Enforcement program plays a critical role across the country supporting states and tribes who may have limited capacity to investigate and prosecute environmental crimes. As a result of the collaborative efforts with our enforcement partners, in FY 2019, the conviction rate for criminal defendants was 98 percent. In FY 2021, the Agency requests $55.1 million and 220.6 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 and use an "enforcement first" approach that maximizes the participation of liable and viable parties in performing and paying for cleanups. The Agency will continue to work to protect communities by ensuring that potentially responsible parties (PRPs) conduct cleanups at Superfund sites, preserving federal taxpayer dollars for sites where there are no viable contributing parties, and recovering costs if EPA expends Superfund appropriated dollars to clean up sites. EPA also will address liability concerns that can be a barrier to potential reuse. Addressing the risks posed by Superfund sites and returning them to productive use strengthens the economy and spurs economic growth. In 2019, the Superfund Enforcement program secured private party commitments for cleanup and cost recovery and billed for oversight amounts totaling more than $961 million. The use of Superfund enforcement tools in 2019 resulted in cleanup and redevelopment at 160 private-party sites.

In FY 2021, EPA requests $162.5 million and 745.3 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. The Agency also will continue to improve and revitalize the Superfund program to ensure that contaminated sites across the country are remediated to protect human health and the environment and returned to beneficial reuse as expeditiously as possible. In FY 2019, Superfund Task Force efforts contributed to achievement of EPA's annual performance goal, by completing 210 enforcement tools to address cleanup and/or long-term protection, including reuse of contaminated sites exceeding EPA's target of 170 tools.

Objective 2: Create Consistency and Certainty. **Outline exactly what is expected of the regulated community to ensure good stewardship and positive environmental outcomes.**

Objective 3.2, Create Consistency and Certainty, directly supports the following long-term performance goals in the *FY 2018-2022 EPA Strategic Plan*:

- By September 30, 2022, meet 100% of legal deadlines imposed on EPA.
- By September 30, 2022, eliminate unnecessary or duplicative reporting burdens to the regulated community by 10,000,000 hours.[51]

The environmental regulatory framework is inherently dynamic. For instance, as part of its statutory obligations, EPA is required to publish many regulations within a set timeframe each year that implement environmental programs and assist the Agency in meeting its core mission. These regulations address newly mandated responsibilities as well as updates and revisions to existing regulations. As EPA meets its obligations to protect human health and the environment through regulatory action, it also must meet another key responsibility by minimizing regulatory uncertainty. Regulatory certainty can help businesses and communities avoid delays and ensure proper planning to comply with environmental regulations. EPA will employ a set of strategies to reduce regulatory uncertainty while continuing to improve human health and environmental outcomes consistent with the Agency's authorities as established by Congress and while considering unique state, tribal, and local circumstances. These strategies, which reflect EPA's commitment to more effective partnerships and greater certainty, compliance, and effectiveness, will help advance Agency goals for streamlining and modernizing permitting and enhancing shared accountability. In FY 2021, EPA requests $71.2 million and 329.0 FTE to support this objective.

As EPA issues new or revised regulations, businesses and individuals may find it challenging to know which rules apply to them and to adjust their compliance strategies. EPA will refocus its approach to regulatory development and prioritize meeting its statutory deadlines to ensure expectations are clear for the regulated community and the public and Agency actions are defensible and consistent with its authorities. The Agency will work to support greater consistency and transparency in consideration of economic costs in the regulatory development process and implementation of Agency programs. The Agency will use new approaches and flexible tools to minimize regulatory uncertainty and improve communications to realize more consistent and better environmental outcomes. EPA will strengthen working relationships with industry sectors to better understand their needs and challenges in implementing Agency requirements and with communities to understand their concerns. This knowledge will enable the Agency to develop better policies and regulations to protect human health and the environment in line with the authorities given to EPA by Congress.

In FY 2021, EPA will develop and engage stakeholders in reviewing a draft base catalog of responsibilities that statutes require EPA to perform in programs delegated to states and tribes.

[51] Baseline is estimated at 173,849,665 information collection and reporting hours. as of October 2, 2017. (Footnote updated from *FY 2018-2022 EPA Strategic Plan* published February 12, 2018.)

This will support the establishment of more effective commitments with partners by minimizing duplication and overlap among EPA programs, states, and tribes. This effort also leverages another commitment EPA is making under its goal to develop more effective partnerships—to identify for all environmental media, an inventory and timeline for state-led permits that EPA reviews.

In FY 2021, EPA will continue to review regulatory guidance documents to identify key opportunities and will clarify and realign Agency approaches to improve consistency and clarity. For example, the Small Minority Business Assistance program provides expertise in ensuring small business prime and subcontracting opportunities to expand the EPA's competitive supplier base in furthering the Agency's mission. The Budget request of $1.1 million and 7.6 FTE supports statutorily mandated advocacy on behalf of the various categories of small businesses, including disadvantaged businesses; certified small businesses located in Historically Underutilized Business Zones (HUBZones); service-disabled veteran-owned small businesses (SDVOSBs); and women-owned small businesses. Further, EPA will strengthen its working relationships with states, tribes, and local communities to transfer knowledge, leveraging its commitments under more effective partnerships, such as the collaboration under E-Enterprise for the Environment. EPA will make available tools and services designed by other federal agencies, states, tribes, or local communities that enhance efficiency and reduce burden on the regulated community, while ensuring protection of human health and the environment. EPA has been successful in implementing small business contracting opportunities in carrying out the Agency's mission. FY 2018 marked the tenth consecutive year that EPA has earned an "A" on the Small Business Administration's Small Business Procurement Scorecard.[52]

The Agency is continuing to implement its long-term performance goal to eliminate unnecessary or duplicative reporting burdens to the regulated community by 10,000,000 hours at the end of FY 2022. The baseline is 173,849,665 hours. In FY 2019, EPA increased reporting burden to the regulated community by 5.9 million hours, compared with a targeted reduction of 2.0 million hours. Most of the increase in FY 2019 was due to high priority efforts that protect public safety and health: (1) the microbial rules for drinking water, which reflect full implementation of the Revised Total Coliform Rule (3.44 million hours); (2) a rule requiring facilities that use extremely hazardous substances to develop a Risk Management Plan (1.78 million hours); (3) a rule increasing the number of facilities subject to reporting under the Emergency Planning and Community Right-to-Know Act (1.05 million hours); and (4) revisions to the Renewable Fuels Standards (0.65 million hours). EPA will continue to work to meet the long-term performance goal of reducing burden by 10,000,000 hours in our FY 2020 and FY 2021 regulatory efforts.

[52] https://www.sba.gov/document/support--environmental-protection-agency-contracting-scorecard.

Objective 3: Prioritize Robust Science. **Refocus the EPA's robust research and scientific analysis to inform policy making.**

Objective 3.3, Prioritize Robust Science, directly supports the following long-term performance goal in the *FY 2018-2022 EPA Strategic Plan*:

- By September 30, 2022, increase the percentage of research products meeting customer needs.[53]

EPA's overall research effort is organized around six integrated and transdisciplinary national research programs. Each program is guided by a Strategic Research Action Plan (StRAP) that is developed in collaboration with EPA's program and regional offices to address their specific needs. EPA's Office of Research and Development is implementing the third generation StRAPs. These updated StRAPs will continue to reflect the scientific requirements of the Agency as well as the needs of states and tribes. StRAPs received active collaboration and involvement from EPA's research program partners to ensure that scientific efforts are responsive to today's environmental concerns.[54] The StRAPs also will help inform the development of EPA's Learning Agenda required by the new Foundations for Evidence-Based Policymaking Act. The Learning Agenda will enhance strategic planning under the GPRMA by helping identify the most important evidence the Agency needs to gather and generate to advance our goals by ensuring we use high quality data and other information to inform our policy and decision making.

EPA will identify, assess, conduct, and apply the best available science to address current and future environmental hazards, develop new approaches, and improve the scientific foundation for environmental protection decisions. EPA conducts problem-driven, interdisciplinary research to address specific environmental risks and is committed to using science and innovation to reduce risks to human health and the environment, based on needs identified by EPA programs as well as state and tribal partners. Specifically, the Agency will strengthen alignment of its research to support EPA programs, states, and tribes in accomplishing their top human health and environmental protection priorities for improved air quality, clean and safe water, revitalized land, and chemical safety.55 In FY 2019, 79 percent of EPA's research products met customer needs, exceeding its performance target of 77 percent. The customers surveyed currently include EPA program offices, regions and partner federal agencies (including Army Corps of Engineers, the National Parks Service, DoD, Department of Agriculture, and more). Working closely with the Environmental Council of States and its subsidiary, the Environmental Research Institute of the States,56 the Agency will strive to connect state research needs with Agency priorities, and work to improve communication and dissemination of research results. Through the public-private coalition Interstate Technology and Regulatory Council,57 EPA will encourage the adoption of innovative technologies and solutions. The Agency also will emphasize the translation of its work products for end-user application and feedback.

[53] 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).
[54] For more information: https://www.epa.gov/research/strategic-research-action-plans-2016-2019. The current updates are not final and will be published when they are finalized.
[55] For more information on EPA's research go to https://www.epa.gov/aboutepa/about-office-research-and-development-ord.
[56] For more information please go to https://www.ecos.org/eris/.
[57] For more information on the Interstate Technology and Regulatory Council, go to http://www.itrcweb.org/.

EPA research will be reviewed by various scientific advisory boards, such as the Board of Scientific Counselors.[58] The Board is made up of recognized experts in various scientific, engineering, and social science fields from industry, business, public and private organizations and research institutes, academia, governments (federal, state, tribal, and local), nongovernmental organizations, and other relevant interest groups.

Air Quality

In coordination with the air program, EPA's research efforts will advance the science and provide information critical to improve air quality and to inform stationary source regulations, vehicle and fuel standards and certification, emission inventories, air quality assessments, and domestic ozone actions.[59] The results of Agency research to support air quality program priorities will inform EPA programs, air programs (state, tribal, and local), communities, and individuals about measures and strategies to reduce air pollution. Researchers will publish peer-reviewed scientific journal articles to disseminate research findings as appropriate. As one example, the Air and Energy Research Program is addressing nitrogen and co-pollutant loadings to watersheds via atmospheric deposition, as well as optimizing approaches to reduce health and risk from uncontrolled wildfires. In FY 2021, EPA requests $33.5 million and 153.8 FTE to conduct air quality research.

Safe and Sustainable Water Resources

In FY 2021, EPA requests $78.9 million and 268.9 FTE for the Safe and Sustainable Water Resources Research program. EPA will develop innovative, cost-effective solutions to current, emerging, and long-term water resource challenges for complex chemical and biological contaminants.[60] Using a systems approach to develop scientific and technological solutions for protecting human health and aquatic ecosystems, EPA researchers partner with program experts, federal and state agencies, tribes, local communities, academia, nongovernmental organizations, and private stakeholders. For example, EPA's researchers are developing laboratory analytical methods, evaluating chemical toxicity, identifying and estimating human exposure to per- and polyfluoroalkyl substances (PFAS), identifying drinking water treatment technologies, and providing technical support and data to EPA and states that can be used to make informed decisions about managing PFAS. In FY 2021, EPA directs an additional $236 thousand with 0.5 FTE from this program area to support science and research to advance implementation of the PFAS Action Plan, which supports the FY 2020 – 2021 PFAS APG.

Examples of research include improving methods for rapid and cost-effective monitoring of waterborne pathogens in recreational waters, investigating the health impacts from exposure to harmful algal/cyanobacteria toxins, and developing innovative methods to monitor, characterize, and predict blooms for early action. In FY 2021, EPA will conduct scientific and related research to support the multi-office effort to reduce and better predict harmful algal blooms (HABs), including tool development for market-based approaches and pilot projects to reduce exposure and

[58] Please see https://www.epa.gov/bosc.
[59] For more information on EPA's Air Research program go to https://www.epa.gov/air-research.
[60] For more information on EPA's Water Research go to https://www.epa.gov/water-research.

toxic events that include predictive modeling and monitoring. In FY 2021, this program includes an increase of $3.3 million with 2.0 FTE for research and technical assistance to address HABs.

In addition, EPA requests an additional $2.5 million to increase research and technical assistance related to lead issues, which supports the FY 2020 – 2021 APG for reducing childhood lead exposures and associated health impacts. Work will be guided by the *Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts* and support the Lead Exposure Reduction Initiative.

Sustainable and Healthy Communities

EPA requests $70.9 million and 294.6 FTE in FY 2021 to support the Sustainable and Healthy Communities Research program. EPA will conduct research to support regulatory activities and protocol development for the National Oil and Hazardous Substances Pollution Contingency Plan and provide on-demand technical support at cleanup sites managed by federal, state or tribal governments, as well as assistance during emergencies.[61] The Agency conducts health, environmental engineering, and ecological research and develops planning and analysis tools for localities nationwide to use in facilitating regulatory compliance and improving environmental and health outcomes.[62] Research is being conducted on end-of-life management of PFAS-containing materials (e.g., industrial waste, household waste) to ensure that PFAS from these materials do not impact the environment. In addition, the Sustainable and Healthy Communities program supports a technical assistance function for states, tribes, and local communities on issues pertaining to ecological and human health risk assessment, as well as site engineering challenges related to PFAS. In FY 2021, this program includes an additional $238 thousand with 0.5 FTE to support science and research to advance implementation of the PFAS Action Plan which supports the FY 2020 – 2021 PFAS APG.

In addition, the program supports the multi-office effort to improve the U.S. recycling system and reduce food loss and waste. EPA will support research that increases the effectiveness of food waste campaigns and study food waste collection and pretreatment technologies from a lifecycle perspective. In FY 2021, this program includes an increase of $850 thousand for research associated with food waste reduction.

EPA requests an additional $1.5 million to increase research and technical assistance related to lead issues. This funding supports the FY 2020–2021 Lead APG which will be guided by the Federal Lead Action Plan. Further, these resources will support the Lead Exposure Reduction Initiative. The program is working to strengthen the scientific basis of EPA's lead-related regulatory and cleanup decisions; identify locations of high exposures and blood lead levels to target remaining lead sources for mitigation; and develop innovative methods for cleaning up Superfund and other contaminated sites. EPA will work to 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 lead blood levels in children, and provide the data needed to reduce uncertainty in lead exposure and risk analysis.

[61] For more information please go to https://www.epa.gov/land-research.
[62] For more information please go to https://www.epa.gov/eco-research and https://www.epa.gov/healthresearch.

Chemical Safety

EPA requests $67.0 million and 241.4 FTE in FY 2021 to support the Chemical Safety Research program. This funding will advance innovative tools that accelerate the pace of data-driven evaluations, enable knowledge-based decisions that protect human health, and advance the science required to anticipate and solve problems. The program will evaluate and predict impacts from chemical use and disposal and provide states and tribes with information, tools, and methods to make better informed, more timely decisions about the thousands of chemicals in the United States.[63]
In June 2018, EPA released a TSCA Alternative Toxicity Testing Strategy Document.[64] This strategic plan, developed jointly by the Chemical Safety Research program and EPA's Chemical Safety and Pollution Prevention program promotes development and implementation of test methods within the TSCA program that are better, faster, less expensive, and reduce the need for animal use.

In FY 2021, this program includes an increase of $289 thousand with 0.5 FTE to support science and research to advance implementation of the PFAS Action Plan and in support of the FY 2020–2021 PFAS APG.

Human and Environmental Risk Assessment

EPA requests $30.9 million and 111.6 FTE in FY 2021 to support the Human and Environmental Risk Assessment Program, including $6.2 million and 28.2 FTE from the Superfund transfer. EPA will focus on the science of assessments that inform Agency, state, and tribal decisions and policies.[65] These risk assessments provide the research and technical support needed to ensure safety of chemicals in the marketplace, revitalize and return land to communities, provide clean and safe water, and work with states and tribes to improve air quality. EPA and other health agencies use Integrated Risk Information System (IRIS) human health assessments to inform national standards, cleanup levels at local sites, and set advisory levels. EPA is working to develop a responsive risk screening process that would engage a cross-agency team and support a singular Agency answer for identified emerging contaminants. EPA also requests an additional $1.0 million to increase research and technical assistance related to lead issues in this domain, in support of the FY 2020–2021 Lead APG, which will be guided by the Federal Lead Action Plan.

Objective 4: Streamline and Modernize. **Issue permits more quickly and modernize our permitting and reporting systems.**

Objective 3.4, Streamline and Modernize, directly supports the following long-term performance goal in the *FY 2018-2022 EPA Strategic Plan*:

- By September 30, 2022, reach all permitting-related decisions within six months.[66]

[63] Please see https://www.epa.gov/chemical-research.
[64] https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/alternative-test-methods-and-strategies-reduce.
[65] Please see https://www.epa.gov/risk/human-health-risk-assessment.
[66] Baseline is 149 new permit applications in backlog as of June 30, 2018, and 479 existing permits in backlog as of May 31, 2019. (Footnote updated from FY 2018-2022 EPA Strategic Plan published February 12, 2018.)

Objective 3.4, Streamline and Modernize, supports the following FY 2020-2021 Agency Priority Goal (APG):

- **Accelerate permitting-related decisions.** By September 30, 2021, EPA will reduce the backlog of new permitting-related decisions to zero from a baseline of 65; and reduce the backlog of permit renewals by 50% from a baseline of 417.

EPA implements a host of environmental statutes that affect the regulated community. Permitting requirements under these statutes can impose a variety of costs, including direct costs and opportunity costs related to uncertainty, delay, and cancellation. Delays in the review of applications for permits and modifications by federal, state, or tribal permitting authorities can postpone or prevent manufacturers from building, expanding, or beginning operations, even if the affected operations ultimately may be deemed suitable as proposed. Delays also can impact construction of major infrastructure projects. EPA is committed to speeding up reviews of permits and modifications to create certainty for the business community, leading to more jobs, increased economic prosperity, and streamlined permit renewals, which incorporate up-to-date information and requirements more quickly, thereby improving environmental protection. In FY 2021, EPA requests a total of $34.2 million and 84.2 FTE in support of this strategic objective.

Through a series of targeted efforts to improve the efficiency and effectiveness of permitting programs, by the end of FY 2019, EPA reduced the backlog of new applications by 65 percent (from 149 to 52 applications, excluding Clean Air Act New Source Review and Title V Operating Permits), meeting the target for the FY 2018-2019 APG. The FY 2020-2021 APG for EPA permits in backlog is expanded to include applications to renew existing permits as well as new applications. In addition, the APG now includes reporting for permits issued under the Clean Air Act (NSR and Title V).[67]

EPA will continue to systematically collect and report permitting data for each of its permitting programs. The Agency also will continue efforts to employ business process improvement strategies, such as Lean management, to improve efficiencies in all permitting processes and meet commitments. EPA will continue to explore options to modernize permitting and reporting processes by implementing shared services to reduce the creation of duplicative/redundant systems and save costs.

In addition to focusing on permits issued by EPA, the Agency will develop a standard, consistent approach for the evaluation and oversight of the national permitting work performed by delegated, approved and authorized states and local agencies. This approach will focus on outcome metrics that are understandable and useful to regulators, the regulated community, and the public while remaining consistent with statutory objectives and requirements.

This objective demonstrates new approaches to streamline and reduce unnecessary burdens and to help communities meet their environmental and economic needs. In FY 2021, an additional $5.1 million with 12.0 FTE are requested to continue to deliver tools, technical assistance, and

[67] CAA permits will not be subject to the six-month goal but will be held to the statutory timeframes for permit issuance (12 months and 18 months, respectively, from receipt of complete application for NSR and Title V permits).

meaningful engagement to economically distressed communities. The investment supports research to support Opportunity Zones across all stakeholders and to hold infrastructure and revitalization roundtables. EPA creates lasting partnerships between economic development, environmental protection and public health, and public and private sector investments that can work together to support locally led, community-driven goals.

EPA's Smart Sectors partnership program provides a platform to collaborate with 13 regulated sectors of the economy and develop more sensible approaches to protect the environment and public health. In FY 2021, EPA requests $374 thousand and 2.0 FTE to continue its progress delivering transparent sector-based environmental and economic performance data to the general public, highlighting best practices for industry, EPA, and states. The Agency will facilitate cross-sector dialogues to identify innovative solutions to environmental problems. Additionally, the program will continue providing sector ombudsmen to connect, facilitate, and convene Agency experts with sector representatives to solve discrete policy, guidance, and implementation issues unique to the sectors.

Objective 5: Improve Efficiency and Effectiveness. **Provide proper leadership and internal operations management to ensure that the Agency is fulfilling its mission.**

Objective 3.5, Improve Efficiency and Effectiveness, directly supports the following long-term performance goals in the *FY 2018-2022 EPA Strategic Plan*:

- By September 30, 2022, reduce unused office and warehouse space by 850,641 square feet.[68]
- By September 30, 2022, reduce procurement processing times by achieving 100% of procurement action lead times (PALT).[69]
- By September 30, 2022, improve 250 operational processes.
- By September 30, 2022, increase enterprise adoption of shared services by four.[70]

Process Improvements

To better support EPA's mission to protect human health and the environment, EPA is improving the efficiency and effectiveness of its business processes. In FY 2021, priority areas include financial, facility, human resource, contract, grant, and information technology (IT)/information management (IM). EPA will take advantage of enhancements and new collaborative and cost-effective tools and technologies. The Agency will continue to build a modern and secure work environment to protect critical information and support its efforts to address the environmental problems of the 21st Century. EPA will continue to modernize and improve business processes and

[68] Baseline is 5,264,846 square feet as of FY 2017.
[69] Baseline, as of September 30, 2018 is 77 percent for all contract actions awarded within PALT. (Footnote updated from *FY 2018-2022 EPA Strategic Plan* published February 12, 2018.)
[70] Baseline is four administrative systems/operations federal shared services in FY 2017. (Footnote updated from *FY 2018-2022 EPA Strategic Plan* published February 12, 2018.)

operations to promote transparency, efficiency, and effectiveness; enhance collaborative, results-driven partnerships with internal and external business partners; recruit, develop, and maintain a highly-skilled, diverse, and engaged workforce; and improve the capabilities and cost-effectiveness of its IT and IM systems. EPA will build on progress being made to employ enterprise risk management and increase effective use of data analysis and visualization tools to inform Agency decision making. To support this strategic objective, EPA requests a total of $932.4 million and 2,225.0 FTE in FY 2021.

EPA will continue to apply EPA Lean Management System (ELMS) principles and leverage input from customer-focused councils, advisory groups, workgroups, portfolio reviews, and federal advisory committees to identify business process streamlining opportunities. The Agency is working to improve its enterprise ethics review process. One aspect of the effort will enhance and standardize the approach and increase rigor of Agency oversight. To improve the efficiency and cost effectiveness of its operations, EPA will continue to standardize and streamline internal business processes in its acquisition and financial management and explore additional federal shared services. EPA made 66 process improvements in FY 2019 after applying ELMS to operational processes across the Agency. Process times were reduced by 50 percent on average.

Improving the efficiency of acquisition activities helps maximize the Agency's use of appropriated resources to implement environmental programs. In FY 2019, EPA met its 85 percent target and is making progress toward achieving 100 percent of procurement action lead times (PALT) by FY 2022. EPA continues to leverage ELMS to identify process improvement opportunities around PALT.

Agency Workforce Planning

Effective workforce management is critical to EPA's ability to accomplish its mission. In FY 2021, EPA will continue to build upon its performance, learning, and succession management activities by providing access to quality training and development opportunities for employees and supervisors to improve their skills, knowledge, and performance. The performance and learning activities are being automated and centralized in FedTalent, a federal shared service tool. Additionally, EPA will continue to leverage workforce planning dashboards to advance human capital priorities by giving managers a strategic view of retirement eligibility, diversity information, occupational series, and grade levels. The dashboards assist EPA with succession planning by helping identify workforce gaps due to anticipated retirements and attrition trends.

Cybersecurity

To protect critical environmental and human health information, EPA will strengthen its cybersecurity posture. The Agency will focus on implementing two key cybersecurity priorities—the mandated federal government-wide Continuous Diagnostics and Mitigation (CDM) effort, and the complementary EPA-specific Cyber Risk Mitigation Projects (CRMPs). These two priorities introduce or improve upon dozens of cybersecurity capabilities, enhance the Agency's ability to respond to threats, and improve EPA's privacy posture in alignment with the Privacy Act of 1974. EPA will work closely with the Department of Homeland Security and other partners in implementing CDM capabilities.

Information Technology Modernization and Shared Services

EPA also will work to transform and modernize its information systems, tools, and processes to improve how the Agency collaborates internally and with external stakeholders. EPA will enhance the power of information by delivering on-demand data to the right people at the right time. To enable the Agency, its partners, and the public to acquire, generate, manage, use, and share information effectively, EPA will improve its IT/IM capabilities and customer experiences.

EPA deployed three additional federal shared services in FY 2019, including the Department of Interior's (DOI) FedTalent for talent management services, the General Services Administration's (GSA) USAccess for identity credentials, and Enterprise Physical Control System (eACS) for facility access control.

In FY 2021, an additional $500 thousand is included to complete the deployment of EPA's Next Generation Grants System (NGGS) and retire outdated legacy grants management system. Additionally, in FY 2021, EPA directs an increase of $500 thousand to support planning for the migration to a federal shared service provider contract writing system to achieve efficiencies, retire a legacy system, and leverage existing solutions. In FY 2021, the Agency will continue to prepare for G-invoicing, the new Treasury system for Interagency Agreements. In addition, this will provide full integration of Treasury's invoice payment process. These systems will integrate with the Agency's accounting systems and reporting interfaces. $2.2 million is included to support implementation of G-Invoicing and other Financial Management Payment Processing Modernization which advance this effort.

To better understand complex interactions between pollutants and the environment and address the environmental problems of the 21st Century effectively and efficiently, EPA and its partners analyze large volumes of data. EPA will develop a comprehensive data management strategy that addresses the collection, management, and use of data generated internally and from external partners including states, tribes, grantees, the regulated community, and citizen science. The Agency will deploy new data analysis, data visualization, and geospatial tools in a cloud-based framework to enable analysis and provide the basis for informed decision making. This work will support Evidence Act requirements.

Environmental decision making across media programs requires access to high-quality data and analytical tools. EPA will build shared IT services, maximizing the benefits of Agency investments and ensuring consistency and scalability in tools and services. EPA programs that receive submissions from outside the Agency, whether from the reporting community, states, tribes, or local governments, will rely increasingly on centrally-developed and maintained information services, decreasing the volume of computer code each program must develop and maintain. For example, in FY 2021 EPA requests an additional $1.2 million with 1.0 FTE to provide data standards and geo-referencing expertise for EPA's research, predictive modeling and monitoring tools and analyses, and policy approaches to target and reduce nutrient pollution that causes Harmful Algal Blooms and impacts water quality across the country. Shared services will reduce reporting burden for submitting entities and improve data quality for EPA. EPA programs, states,

and tribes will work to establish a common catalog of shared services and agree to a minimum set of common standards and practices.

The Agency will enhance its enterprise-wide records management system (ECMS) to facilitate the electronic management of data and information, multimodal access, effective searching, and ease of use, as well as provide support to all EPA offices in meeting statutory requirements under the Federal Records Act. These services are crucial to Agency operations. In FY 2021, an additional $4.0 million is requested to continue progress towards upgrading the Agency's enterprise-wide records management system and enhancing the digitization of paper records. E-Records and eDiscovery support the long-term performance goal of eliminating the backlog and meeting statutory deadlines for responding to Freedom of Information Act (FOIA) requests by facilitating the process of searching and identifying records related to the requests. The Agency's future information management architecture will support official recordkeeping requirements, as well as daily document management, business processes, information access, and legal needs of EPA employees and organizations, while also being flexible, scalable, and cost effective. In addition, digitization of records and an enterprise-wide records management system will support the Agency's long-term performance goal of reducing unused office and warehouse space by 850,641 square feet by September 30, 2022. In FY 2021, $3.8 million is requested for resources to support Discovery Services.

Science and
Technology

Environmental Protection Agency
FY 2021 Annual Performance Plan and Congressional Justification

Table of Contents – Science and Technology

Program Projects in S&T 65
Clean Air 68
Clean Air Allowance Trading Programs 69
Atmospheric Protection Program 72
Federal Support for Air Quality Management 73
Federal Vehicle and Fuels Standards and Certification 75
Indoor Air and Radiation 80
Indoor Air: Radon Program 81
Radiation: Protection 82
Radiation: Response Preparedness 84
Reduce Risks from Indoor Air 86
Enforcement 87
Forensics Support 88
Homeland Security 90
Homeland Security: Critical Infrastructure Protection 91
Homeland Security: Preparedness, Response, and Recovery 97
Homeland Security: Protection of EPA Personnel and Infrastructure 103
IT / Data Management/ Security 105
IT / Data Management 106
Operations and Administration 108
Facilities Infrastructure and Operations 109
Pesticides Licensing 111
Pesticides: Protect Human Health from Pesticide Risk 112
Pesticides: Protect the Environment from Pesticide Risk 116
Pesticides: Realize the Value of Pesticide Availability 119
Research: Air and Energy 122
Research: Air and Energy 123
Research: Safe and Sustainable Water Resources 128
Research: Safe and Sustainable Water Resources 129
Research: Sustainable Communities 136

Research: Sustainable and Healthy Communities 137
Research: Chemical Safety and Sustainability 144
Research: Chemical Safety for Sustainability 145
Health and Environmental Risk Assessment 152
Water: Human Health Protection 158
Drinking Water Programs 159
Congressional Priorities 162
Water Quality Research and Support Grants 163

APPROPRIATION: Science & Technology
Resource Summary Table

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Science & Technology				
Budget Authority	$695,063.1	$716,449.0	$484,733.0	-$231,716.0
Total Workyears	1,892.9	1,983.7	1,501.0	-482.7

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

Bill Language: Science and 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 and travel expenses; procurement of laboratory equipment and supplies; and other operating expenses in support of research and development, $484,733,000, to remain available until September 30, 2022, of which $19,000,000 shall be derived from the Special Treasury fund established under section 217(b) of the Clean Air Act (42 U.S.C. 7552(b).

Program Projects in S&T

(Dollars in Thousands)

Program Project	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Clean Air				
Clean Air Allowance Trading Programs	$7,834.8	$7,463.0	$5,739.0	-$1,724.0
Atmospheric Protection Program	$8,044.4	$7,772.0	$0.0	-$7,772.0
Federal Support for Air Quality Management	$10,878.2	$6,039.0	$3,712.0	-$2,327.0
Federal Vehicle and Fuels Standards and Certification	$92,789.2	$94,790.0	$80,932.0	-$13,858.0
Subtotal, Clean Air	$119,546.6	$116,064.0	$90,383.0	-$25,681.0
Indoor Air and Radiation				
Indoor Air: Radon Program	$16.7	$143.0	$0.0	-$143.0
Radiation: Protection	$2,794.7	$1,781.0	$1,047.0	-$734.0
Radiation: Response Preparedness	$2,545.0	$3,089.0	$4,167.0	$1,078.0
Reduce Risks from Indoor Air	$216.7	$136.0	$0.0	-$136.0

Program Project	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Subtotal, Indoor Air and Radiation	$5,573.1	$5,149.0	$5,214.0	$65.0
Enforcement				
Forensics Support	$11,534.7	$13,592.0	$11,723.0	-$1,869.0
Homeland Security				
Homeland Security: Critical Infrastructure Protection	$7,957.5	$9,053.0	$7,732.0	-$1,321.0
Homeland Security: Preparedness, Response, and Recovery	$20,492.7	$23,593.0	$25,542.0	$1,949.0
Homeland Security: Protection of EPA Personnel and Infrastructure	$410.0	$443.0	$500.0	$57.0
Subtotal, Homeland Security	$28,860.2	$33,089.0	$33,774.0	$685.0
IT / Data Management / Security				
IT / Data Management	$3,092.6	$3,072.0	$2,890.0	-$182.0
Operations and Administration				
Facilities Infrastructure and Operations	$67,856.9	$65,372.0	$67,908.0	$2,536.0
Pesticides Licensing				
Pesticides: Protect Human Health from Pesticide Risk	$3,098.5	$3,154.0	$2,443.0	-$711.0
Pesticides: Protect the Environment from Pesticide Risk	$2,415.8	$2,327.0	$2,616.0	$289.0
Pesticides: Realize the Value of Pesticide Availability	$354.6	$405.0	$684.0	$279.0
Subtotal, Pesticides Licensing	$5,868.9	$5,886.0	$5,743.0	-$143.0
Research: Air and Energy				
Research: Air and Energy	$85,895.8	$94,496.0	$33,543.0	-$60,953.0
Research: Safe and Sustainable Water Resources				
Research: Safe and Sustainable Water Resources	$100,123.7	$110,890.0	$78,948.0	-$31,942.0
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$135,083.1	$132,477.0	$58,597.0	-$73,880.0
Research: Chemical Safety for Sustainability				
Health and Environmental Risk Assessment	$37,003.7	$37,351.0	$24,694.0	-$12,657.0
Research: Chemical Safety for Sustainability				
Endocrine Disruptors	$15,230.0	$16,021.0	$10,775.0	-$5,246.0
Computational Toxicology	$22,262.3	$21,089.0	$18,181.0	-$2,908.0
Research: Chemical Safety for Sustainability (other activities)	$49,811.9	$51,807.0	$37,996.0	-$13,811.0

Program Project	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Subtotal, Research: Chemical Safety for Sustainability	$87,304.2	$88,917.0	$66,952.0	-$21,965.0
Subtotal, Research: Chemical Safety for Sustainability	$124,307.9	$126,268.0	$91,646.0	-$34,622.0
Water: Human Health Protection				
Drinking Water Programs	$3,227.6	$4,094.0	$4,364.0	$270.0
Congressional Priorities				
Water Quality Research and Support Grants	$4,092.0	$6,000.0	$0.0	-$6,000.0
TOTAL S&T	**$695,063.1**	**$716,449.0**	**$484,733.0**	**-$231,716.0**

*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
Goal: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$15,302.4	$13,619.0	$13,231.0	-$388.0
Science & Technology	***$7,834.8***	***$7,463.0***	***$5,739.0***	***-$1,724.0***
Total Budget Authority	$23,137.2	$21,082.0	$18,970.0	-$2,112.0
Total Workyears	64.5	63.7	61.7	-2.0

Program Project Description:

This program is responsible for managing the Clean Air Status and Trends Network (CASTNET), a long-term ambient monitoring network, which serves as the Nation's primary source for assessing atmospheric data trends in sulfur and nitrogen deposition, regional ground-level ozone, and other forms of particulate and gaseous air pollution. Used in conjunction with the National Atmospheric Deposition Program's wet deposition networks and other ambient air quality networks, CASTNET's long-term data products are used to determine the effectiveness of national and regional emission control programs. The CASTNET program provides spatial and temporal trends in ambient air quality and atmospheric deposition in non-urban areas and sensitive ecosystems (e.g., National Parks). CASTNET ozone data allow EPA to assess National Ambient Air Quality Standards compliance in areas not monitored by the State, Local and Tribal Ambient Monitoring Networks. 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).

EPA's Long-Term Monitoring (LTM) program was created to assess the health of water bodies 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 changing pollutant emissions. The LTM program is one of the longest running programs at EPA, providing a longitudinal dataset based on sampling and measurements that go back to 1983.

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 designed to control SO_2 and NO_X include Title IV (the Acid Rain Program) of the Clean Air Act, the Cross-State Air Pollution Rule (CSAPR), and the Texas SO_2 Trading Program.

Both the CSAPR and the CSAPR Update Rule require 27 states in the eastern U.S. to limit their statewide emissions of SO_2 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. The set emissions limitations that are defined in terms of maximum statewide "budgets" for emissions of annual SO_2, annual NO_x, and/or ozone-season NOx from each state's large electric generating units. The Texas SO_2 Trading Program addresses Texas' obligations to implement best available retrofit technology, reasonable progress, and interstate visibility transport, as those obligations relate to SO_2 emissions from electricity generating units.[1]

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, EPA will:

- Continue to maintain long-term CASTNET monitoring sites that provide atmospheric deposition and rural ozone concentrations. Provide support to assure high-quality analysis and reporting of environmental data from CASTNET and LTM surface water monitoring networks.

- Analyze and assess trends in sulfur and nitrogen deposition, rural ozone concentrations, surface water quality, and other indicators of ecosystem health and ambient air quality in non-urban areas of the U.S.

- Assure the continuation of ongoing SO_2 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.[2]

- 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.[3]

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

[1] Clean Air Act § 110 and § 169A; see 40 CFR 52.2312.
[2] Clean Air Act §§ 110(a)(2)(D) and 401.
[3] For more information on program performance, please see: https://www.epa.gov/airmarkets/clean-air-markets-progress.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$1,724.0) This program change reduces support for activities such as technical analysis, modeling, and emissions monitoring support to states as they develop, implement, and assess their state and regional programs to address regional and national air issues from large stationary sources.

Statutory Authority:

Clean Air Act.

Atmospheric Protection Program
Program Area: Clean Air
Goal: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$90,985.1	$95,436.0	$14,512.0	-$80,924.0
Science & Technology	***$8,044.4***	***$7,772.0***	***$0.0***	***-$7,772.0***
Total Budget Authority	$99,029.5	$103,208.0	$14,512.0	-$88,696.0
Total Workyears	201.3	200.6	120.0	-80.6

Program Project Description:

The Atmospheric 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 2021 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2021.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$7,772.0 / -28.7 FTE) This funding change proposes to eliminate the Atmospheric Protection Program from the S&T appropriation.

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
Goal: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$132,513.9	$130,588.0	$114,095.0	-$16,493.0
Science & Technology	***$10,878.2***	***$6,039.0***	***$3,712.0***	***-$2,327.0***
Total Budget Authority	$143,392.1	$136,627.0	$117,807.0	-$18,820.0
Total Workyears	824.8	842.0	638.8	-203.2

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 risk 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. During FY 2021, 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 2021, EPA will continue to conduct the periodically required "technology reviews" of NESHAP and conduct required risk assessments for MACT-based NESHAP. The Program will prioritize conducting reviews of NESHAP for 14 source categories for which the statutory deadlines passed and 13 of which are now subject to court-ordered dates. EPA expects to similarly prioritize reviews for the five source categories currently subject to litigation.

EPA works with other internal and external stakeholders on improving ambient air monitoring networks and measurement techniques to fill data gaps and to better estimate population exposure to criteria and toxic air pollutants. EPA will provide quality assurance proficiency testing for federal and commercial laboratories that produce data from $PM_{2.5}$ air monitoring systems to ensure quality data for use in determining air quality.

In FY 2021, EPA will work with partners to continue improving 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 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$1,217.0) This change is an increase due to the recalculation of base payroll costs.

- (-$3,544.0 / -3.1 FTE) This program change is a decrease in EPA's assistance to state, tribal, and local agencies' Clean Air Act implementation activities, such as SIP/TIP development as well as activities to reduce air toxic emissions and risks for communities.

Statutory Authority:

Clean Air Act.

Federal Vehicle and Fuels Standards and Certification

Program Area: Clean Air
Goal: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Science & Technology	***$92,789.2***	***$94,790.0***	***$80,932.0***	***-$13,858.0***
Total Budget Authority	$92,789.2	$94,790.0	$80,932.0	-$13,858.0
Total Workyears	287.9	308.5	296.7	-11.8

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 vehicles; 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 access to information on transportation programs and incentive-based programs.

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.

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, greenhouse gas, and fuel economy standards. The NVFEL conducts vehicle emission tests as part of pre-production tests, certification audits, in-use assessments, and recall programs to ensure compliance with mobile source programs.

Renewable Fuel Standard Program (RFS): EPA administers the Renewable Fuel Standard (RFS) Program. The RFS 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.

The four renewable fuel categories under the RFS are biomass-based diesel, cellulosic biofuel, advanced biofuel, and total renewable fuel. Obligated parties under the RFS Program are refiners or importers of gasoline or diesel fuel. Compliance is achieved by blending renewable fuels into

transportation fuel, or by obtaining credits (called "Renewable Identification Numbers" or RINs) to meet an EPA-specified Renewable Volume Obligation (RVO).

Work with State and Local Governments: EPA works with state and local governments to ensure the technical integrity of the mobile source control emission benefits included in State Implementation Plans (SIPs) and transportation conformity determinations. EPA develops and provides information and tools to assist state, local, and tribal agencies, as well as communities, to reduce air toxics emissions and risks specific to their local areas. Reductions in emissions of mobile source air toxics, such as components of diesel exhaust, are achieved through establishing national emissions standards and partnership approaches working with state, local, and tribal governments, as well as a variety of non-governmental stakeholder groups.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. The Federal Vehicle and Fuels Standards and Certification program supports the Agency's integrated criteria pollutant and greenhouse gas (GHG) compliance programs by operating test cells that simultaneously measure criteria pollutants and GHG emissions, reviewing certification applications for light-duty vehicles and heavy-duty engines to approve applications for both the criteria pollutant and GHG programs, and examining potential violations.

In FY 2021, the Federal Vehicle and Fuels Standards and Certification Program will continue to focus its efforts on certification decisions. 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. EPA anticipates reviewing and approving about 5,000 vehicle and engine emissions certification requests, including light-duty vehicles, heavy-duty diesel engines, nonroad engines, marine engines, locomotives, and others. There has been a significant increase in demand for EPA's certification services over the last two decades, due in part to the addition of certification requirements for marine, other nonroad, and small spark-ignited engines.

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 calendar year 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, which receives over 2,100 test results annually. EPA reviews the data and determines if there are any specific vehicles, models, or manufacturers that are failing emissions in-use. The Agency will use this information submitted by light-duty manufacturers to determine if there are vehicle models 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.

In August 2018, EPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) released a notice of proposed rulemaking, the Safer Affordable Fuel Efficient (SAFE) Vehicles Rule, which proposed to amend the federal fuel economy and

greenhouse gas emissions standards for model years 2021-2026 passenger cars and light trucks. In addition, SAFE clarified that federal law (Energy Policy and Conservation Act (EPCA)) preempts state and local tailpipe GHG emissions standards and zero emission vehicle (ZEV) mandates. In the SAFE rule, EPA also proposed to withdraw portions of the Clean Air Act waiver it had previously granted to California in January 2013, as it relates to California's light-duty vehicle GHG and ZEV programs.[4]

In September 2019, EPA and NHTSA finalized Part 1 of the SAFE Rule, in which EPA withdrew the Clean Air Act preemption waiver for California's GHG and ZEV programs. In the SAFE Part 1 final rule, NHTSA also promulgated regulations to preempt state and local standards related to fuel economy under EPCA. The SAFE Part 2 final rule, which will establish federal fuel economy standards and revised GHG emissions tailpipe standards for Model Year (MY) 2021-2026 light-duty vehicles, is expected to be finalized by April 2020.

The *Cleaner Trucks Initiative* is a rulemaking effort to address NO_x emissions from heavy-duty trucks. As a part of this rulemaking effort, EPA plans to evaluate the technologies which can ensure real-world compliance with emissions standards and also will seek opportunities to modernize and streamline the regulatory framework for the heavy-duty highway sector.

In FY 2021, EPA plans to release the final Fuels Regulatory Streamlining Rule based on the notice of proposed rulemaking in FY 2020. In addition, EPA will begin implementation of the rule to streamline and update EPA's existing gasoline, diesel, and other fuels regulations to improve overall compliance assurance and maintain environmental performance, while reducing compliance costs for industry as well as EPA. This rule streamlines the existing fuels regulations by deleting expired provisions, eliminating redundant compliance provisions, removing unnecessary and out-of-date requirements, and replacing them with a single set of provisions that will apply across all gasoline, diesel, and other fuels programs under the current regulations.

In FY 2021, 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, inaccurate fuel economy labels on more than a million vehicles from several well-known manufacturers.

In FY 2021, EPA will continue implementing the Tier 3 standards for light-duty vehicles and certifying manufacturers' fleets for vehicle MY 2022. 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 deploy its laboratory testing resources to ensure that new cars and trucks are in compliance with the Tier 3 emissions standards.

EPA will continue working with the International Maritime Organization and the International Civil Aviation Organization (ICAO) on programs to control conventional pollutant emissions from marine and aircraft engines, respectively. In FY 2021, the Agency will work with ICAO on

[4] Information on the proposal may be found at the following website: https://www.epa.gov/regulations-emissions-vehicles-and-engines/safer-affordable-fuel-efficient-safe-vehicles-proposed.

its program to develop international action plans to reduce particulate matter (PM) emissions from international civil aviation.

The Motor Vehicle Emissions Simulator (MOVES) is the Agency's emission modeling system that estimates emissions for mobile sources at the national, county, and project levels for criteria air pollutants, greenhouse gases, and air toxics. In FY 2021, MOVES will support the Agency's emission control programs, as well as provide critical support to states in their determination of program needs to meet air quality standards. The Agency also will support users on any release of a new model version based on the best available data and science.

In FY 2021, EPA will continue to provide state and local governments with assistance in developing SIPs and providing assistance with transportation conformity determinations. EPA will continue to work with states and local governments to ensure the technical integrity of the mobile source emission estimates in their SIPs. EPA will assist in identifying control options available and provide guidance, as needed. In addition, EPA will ensure national consistency in how conformity determinations are conducted across the U.S. and in the development of motor vehicle emissions budgets in air quality plans, for use in conformity determinations.

EPA will continue to provide assistance to state and local transportation and air quality agencies working on $PM_{2.5}$ hot-spot analyses. This will help ensure that analyses use the latest available information and that a measure of consistency exists across the Nation. Additionally, EPA will continue partnering with states to support inspection and maintenance (I/M) programs that focus on in-use vehicles and engines. Basic and/or enhanced I/M testing is currently being conducted in over 30 states with technical and programmatic guidance from EPA.

In FY 2021, EPA will continue to work with a broad range of stakeholders to develop targeted, sector-based, and place-based incentives for diesel fleets (including school buses, ports, and freight) to limit emissions from older, pre-2007 diesel engines not subject to stringent emissions standards. Tens of 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.[5] Because large numbers of people live near ports and are vulnerable to mobile source diesel emissions, EPA will focus its efforts on reducing mobile source emissions in and around ports. 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.

EPA will continue to implement the RFS Program and to carry out actions required by the EPAct of 2005 and the EISA of 2007, including operating and maintaining the credit trading systems. EISA expanded the renewable fuels provisions of EPAct and requires additional studies in various areas of renewable fuel use. EISA requires that EPA set an annual volume standard for renewable fuels, and the 2021 RFS volume requirements are statutorily required to be promulgated in FY 2020. In 2021, EPA will promulgate the annual volume standard for 2022.

[5] 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.

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 apply its lifecycle analysis to such fuels to evaluate and determine eligibility for the Program.

In FY 2021, 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 Renewable Identification Numbers (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 2021, EPA will continue to implement its Fuel and Fuel Additive Registration program. The Agency will prioritize its review and decisions for Part 79 registrations.

Performance Measure Targets:

(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 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					5,200	5,000	5,000	5,000	Certificates
Actual	4,225	4,360	4,453	5,109	4,869	4,711			

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$4,633.0) This change is an increase due to the recalculation of base payroll costs.

- (+$480.0) This change to fixed and other costs is an increase due to the recalculation of lab utilities.

- (-$18,971.0 / -11.8 FTE) This program change streamlines technical assistance to industry, stakeholders, state and local governments, and other partners and focuses the program on efficiently and effectively implementing core statutory requirements, including ensuring compliance with national standards to reduce air pollution from vehicles, engines, and fuels and assessing the capabilities of new and current vehicle technologies.

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.

Indoor Air and Radiation

Indoor Air: Radon Program
Program Area: Indoor Air and Radiation
Goal: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$2,642.6	$3,136.0	$0.0	-$3,136.0
Science & Technology	***$16.7***	***$143.0***	***$0.0***	***-$143.0***
Total Budget Authority	$2,659.3	$3,279.0	$0.0	-$3,279.0
Total Workyears	9.1	9.0	0.0	-9.0

Program Project Description:

Title III of the Toxic Substances Control Act (TSCA) authorizes EPA to undertake a variety of activities 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, and advises the public of steps they can take to reduce exposure. EPA's radon program has provided important guidance, technical assistance, and funding to help states establish their own programs.

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$143.0) This funding change proposes to eliminate the Indoor Air: Radon Program in the S&T appropriation.

Statutory Authority:

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

Radiation: Protection
Program Area: Indoor Air and Radiation
Goal: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$10,880.5	$7,992.0	$2,470.0	-$5,522.0
Science & Technology	***$2,794.7***	***$1,781.0***	***$1,047.0***	***-$734.0***
Hazardous Substance Superfund	$1,768.6	$1,985.0	$2,122.0	$137.0
Total Budget Authority	$15,443.8	$11,758.0	$5,639.0	-$6,119.0
Total Workyears	57.4	53.8	25.0	-28.8

Program Project Description:

EPA supports waste site characterization and cleanup by providing field and fixed laboratory environmental radiological and radioanalytical data and technical support, radioanalytical training to state and federal partners, and developing new and improved radioanalytical methods and field measurement technologies. 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 in the event of a radiological accident or incident. Together, these organizations provide technical support for conducting site-specific radiological characterizations and cleanups.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, EPA, in cooperation with states, tribes, and other federal agencies, will provide limited 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 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$39.0) This change is an increase due to the recalculation of base payroll costs.

- (-$41.0) This change to fixed and other costs is a reduction due to the recalculation of lab utilities.

- (-$732.0 / -4.2 FTE) This program change decreases support activities at the National Analytical Radiation Environmental Laboratory (NAREL) in Montgomery, Alabama and the National Center for Radiation Field Operations (NCRFO) in Las Vegas, Nevada.

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: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$2,078.1	$2,196.0	$2,350.0	$154.0
Science & Technology	***$2,545.0***	***$3,089.0***	***$4,167.0***	***$1,078.0***
Total Budget Authority	$4,623.1	$5,285.0	$6,517.0	$1,232.0
Total Workyears	26.3	33.3	31.5	-1.8

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 Office of Radiation and Indoor Air program's RERT asset is part of the Nuclear Incident Response Team under the Department of Homeland Security.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, EPA's RERT will provide limited support for federal radiological emergency response and recovery operations under the National Response Framework and the National Oil and Hazardous Substances Pollution Contingency Plan. They will support basic operations (e.g., on-site technical support/consultation, fixed laboratory, and mobile laboratory analyses) to provide for the rapid collection of field measurements/samples and accurate radionuclide analyses of environmental samples.[6]

In FY 2021, NAREL and NCRFO will: maintain core levels of readiness for radiological emergency responses; participate in the most 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,

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

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

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$416.0) This change is an increase due to the recalculation of base payroll costs.
- (+$392.0) This change to fixed and other costs is an increase due to the recalculation of lab utilities.
- (+$270.0 / -0.7 FTE) This net program change reflects an adjustment in support activities for preparedness work, including basic laboratory analytic functions.

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: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$10,931.6	$11,627.0	$0.0	-$11,627.0
Science & Technology	***$216.7***	***$136.0***	***$0.0***	***-$136.0***
Total Budget Authority	$11,148.3	$11,763.0	$0.0	-$11,763.0
Total Workyears	34.7	37.2	0.0	-37.2

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. EPA supports field measurements and assessments and provides technical support for indoor air quality remediation, when requested.

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$136.0 / -1.4 FTE) This funding change proposes to eliminate the Reduce Risks from Indoor Air program in the S&T account.

Statutory Authority:

Title III of the Toxic Substances Control Act (TSCA); Title IV of the Superfund Amendments and Reauthorization Act of 1986 (SARA); Clean Air Act.

Enforcement

Forensics Support
Program Area: Enforcement
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Compliance with the Law

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Science & Technology	***$11,534.7***	***$13,592.0***	***$11,723.0***	***-$1,869.0***
Hazardous Substance Superfund	$1,402.3	$1,145.0	$1,312.0	$167.0
Total Budget Authority	$12,937.0	$14,737.0	$13,035.0	-$1,702.0
Total Workyears	57.4	68.9	52.1	-16.8

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 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.[7] The NEIC maintains a sophisticated chemistry and physical science laboratory and a corps of highly trained inspectors and scientists with expertise across media. The NEIC works closely with EPA's Criminal Investigation Division to provide technical support (e.g., sampling, analysis, consultation, and testimony) to criminal investigations. The NEIC also works closely with EPA's programs to provide technical support, consultation, on-site inspection, investigation, and case resolution services in support of the Agency's Civil Enforcement Program.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in the *FY 2018 - 2022 EPA Strategic Plan*. The Forensics Support Program provides expert scientific and technical support for EPA's criminal and civil enforcement efforts. In FY 2021, NEIC will continue to streamline its forensics work, and identify enhancements to our sampling and analytical methods, using existing technology. The Program will build on its progress using the EPA Lean Management System 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. The results of these efforts will inform EPA's work in FY 2021 and beyond.

[7] 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.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$1,825.0) This change is an increase due to the recalculation of base payroll costs.
- (-$3,768.0 / -16.3 FTE) This net decrease reflects a focus on analyzing material to attribute it to individual sources or facilities and a reduction in other analytical support.
- (+$74.0) This net change to fixed and other costs is an increase due to the recalculation of rent, utilities, and security or lab fixed 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 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.

Homeland Security

Homeland Security: Critical Infrastructure Protection

Program Area: Homeland Security
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$444.4	$840.0	$1,361.0	$521.0
Science & Technology	***$7,957.5***	***$9,053.0***	***$7,732.0***	***-$1,321.0***
Total Budget Authority	$8,401.9	$9,893.0	$9,093.0	-$800.0
Total Workyears	19.4	22.6	21.0	-1.6

Program Project Description:

Under the federal homeland security system, EPA is the Sector-Specific 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 U.S. 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 – 2022 EPA Strategic Plan*. 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 2021, under this homeland security program, EPA will train about 1,500 water utilities, state officials, and federal emergency responders to become more resilient to any natural or manmade incident that could endanger water and wastewater services. In FY 2021, EPA will provide tools, training, and technical assistance which will address the highest risks confronting the water sector.

Natural Disasters and General Preparedness

Drought, floods, hurricanes, earthquakes, and other natural disasters represent a high risk to the water sector owing to their historical frequency of occurrence and their enormous potential for destruction. As evident from several recent natural disasters, the level of preparedness within the water sector varies significantly— with many utilities lacking an adequate preparedness capability. In FY 2021, EPA will improve the preparedness of the water sector by providing nationwide training sessions to address natural disasters and general preparedness with the objective to train water and wastewater systems, state officials, and emergency response partners. Specifically, EPA will:

- Provide in-person trainings and workshops which will include: Incident Command System/National Incident Management System training; drought response training; flood response training; state functional exercises (e.g., scenarios of hurricanes, floods, and earthquakes); resource typing and site access workshops; a regional interstate emergency response exercise (e.g., hurricane), etc.

- Conduct tabletop and functional exercises to improve the operation of intra-state and inter-state mutual aid agreements among water utilities.

- Implement lessons learned, of relevance to the water sector, from the most recent hurricane seasons, as identified by reports from the 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,*[8] with an emphasis on projects addressing the following four priorities: (1) establishing the critical lifeline status of the 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 water and wastewater sector for area-wide loss of water and power; and (4) advancing recognition of vulnerabilities and needed responses related to cyber risk management.

- Conduct nationwide training sessions with three critical, inter-dependent sectors: health care, emergency services, and energy. Most incidents, particularly natural disasters, have underscored the mutual reliance on the water sector with other lifeline sectors. Through training sessions 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/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, to describe existing water security efforts and progress in achieving the sector's key metrics.

Water Security Initiative and Water Lab Alliance

Water Security Initiative. The Water Security Initiative (WSI) designs and demonstrates 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 2021 request includes $3.45 million for necessary WSI

[8]For more information, please see: https://www.waterisac.org/sites/default/files/public/2017_CIPAC_Water_Sector_Roadmap_FINAL_051217.pdf.

Surveillance and Response System (SRS) activities to: 1) continue refining technical assistance products based on the five full-scale SRS pilots, 2) implement a monitoring and response program for water utilities focused on source water chemical spills, and 3) provide direct technical assistance to the dozens of water utilities that seek to leverage EPA's expertise in deploying their own warning system.

In FY 2021, EPA will train about 50 drinking water utilities in the design, operation, and response components of early contaminant warning systems. In particular, EPA will:

- Continue efforts to promote the water sector's adoption of Water Quality Surveillance and Response Systems. This will help to rapidly detect and respond to water quality problems, such as contamination in the distribution system, in order to reduce public health and economic consequences through the development of several online training modules and webinars, as well as the provision of in-person direct technical assistance.

- Build upon the Drinking Water Mapping Application to Protect Source Waters (DWMAPS)[9] and the new chemical spill and storage notification requirements in the America's Water Infrastructure Act of 2018. EPA will compile and disseminate chemical storage data from state and local sources 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 implementing effective source water contamination detection and response systems.

- Conduct nationwide training sessions for its SRS Capabilities Assessment Tool,[10] a web-based, easy-to-use, decision support tool that presents the user with a series of questions by which 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 program[11] within the water sector - the purpose of which is to: demonstrate the application of SRS tools in designing and operating an early warning system for contamination events; illustrate additional applications of SRS tools, such as extending the SRS approach to source water monitoring; and identify champions, within the industry, for implementing surveillance and response systems.

Water Laboratory Alliance. In a contamination event, the sheer volume or unconventional type of samples could quickly overwhelm the capacity or capability of a single laboratory. To address this potential deficiency, EPA has established a national Water Laboratory Alliance (WLA) comprised of laboratories harnessed from the range of existing lab resources from the local (e.g., water utility) to the federal levels (e.g., the Centers for Disease Control and Prevention's (CDC) Laboratory Response Network). In FY 2021, EPA will continue to promote, through exercises, expert

[9] For more information, please see: https://www.epa.gov/sourcewaterprotection/drinking-water-mapping-application-protect-source-waters-dwmaps.
[10] For more information, please see: https://www.epa.gov/sites/production/files/2015-06/documents/srs_fact_sheet.pdf.
[11] For more information, please see: https://www.epa.gov/waterqualitysurveillance.

workshops, and association partnerships, the Water Laboratory Alliance Plan,[12] which provides a protocol for coordinated laboratory response to a surge of analytical needs. In FY 2021, under WLA, EPA will train approximately 50 laboratories in improving their ability to handle potential problems associated with surge capacity and analytical method capabilities during an emergency.

In particular, EPA will:

- Continue 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.[13] For the WLA to become a robust infrastructure that can cover major population centers and address a diverse array of high priority contaminants, membership must continue to increase.

- Continue to target laboratories located in areas where the WLA has both inadequate membership levels and gaps in laboratory analytical capabilities.

- Coordinate with other federal agencies, primarily DHS, CDC, Food and Drug Administration, and Department of Defense, on chemical, biological, and radiological contaminants of high concern and how to detect and respond to their presence in drinking water and wastewater systems.

- 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).

Cybersecurity

Cybersecurity represents a substantial concern for the water sector, given the ubiquitous access to critical water treatment systems from the internet. In FY 2021, EPA will fulfill its obligations under Executive Order 13636 – *Improving Critical Infrastructure Cybersecurity*[14] – 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 training sessions in cybersecurity threats and countermeasures for about 200 water and wastewater utilities. Specifically, EPA will:

[12] For more information, please see: https://www.epa.gov/waterlabnetwork.
[13] For more information, please see: https://www.epa.gov/dwlabcert/contact-information-certification-programs-and-certified-laboratories-drinking-water.
[14] For more information, please see: https://www.dhs.gov/publication/executive-order-13636-improving-critical-infrastructure-cybersecurity.

- Conduct a one-day classroom training, at locations distributed nationally, on water sector cybersecurity. The training will address cybersecurity threats (including ransomware), vulnerabilities, consequences, best practices, and incident response planning.

- Update and/or develop new course materials owing to the evolving nature of the cyber threat, such as the recently documented role of Russian state actors in infiltrating water system industrial control processes and business enterprise functions.

- Develop brief, targeted guidance documents for underserved segments of the water sector, such as small systems and technical assistance providers.

- Continue to implement a new training program for technical assistance providers that will create a nationwide, state-level network capable of providing direct assistance to water utilities in adopting and tracking cybersecurity practices across the water sector.

America's Water Infrastructure Act (AWIA)

In FY 2021, EPA will continue its efforts to fulfill the mandates of the Community Water System Risk and Resilience section of AWIA requiring community water systems, serving a population greater than 3,300, to prepare risk assessments and emergency response plans. EPA will provide technical assistance to these systems on how to conduct resilience assessments, prepare Emergency Response Plans (ERPs), and certify completion of these assessments and plans. As required by the law, EPA also will provide guidance to community water systems serving fewer than 3,300 people on how to develop a risk assessment and ERP. EPA will provide technical assistance to water systems to address drinking water vulnerabilities where EPA determines an urgent and immediate need. The EPM Homeland Security: Critical Infrastructure Protection Program also can support AWIA homeland security related work.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$521.0) This change is an increase due to the recalculation of base payroll costs.

- (-$1,842.0 / -3.8 FTE) This program change streamlines emergency response efforts for natural disasters through further coordination with other federal agencies and through enhanced coordination of activities with work performed in the Homeland Security: Preparedness, Response, and Recovery Program.

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: A Cleaner, Healthier Environment
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Science & Technology	***$20,492.7***	***$23,593.0***	***$25,542.0***	***$1,949.0***
Hazardous Substance Superfund	$31,526.7	$31,599.0	$33,454.0	$1,855.0
Total Budget Authority	$52,019.4	$55,192.0	$58,996.0	$3,804.0
Total Workyears	115.3	124.1	127.1	3.0

Program Project Description:

Exposure to hazardous chemicals, 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.

As part of the FY 2021 President's Budget, EPA's Research and Development Program's six integrated and transdisciplinary research programs developed and are implementing the third generation Strategic Research Action Plans (StRAPs). These updated StRAPs continue to reflect the research needs of the Agency's program and regional offices, states, and tribes. The StRAPs received active collaboration and involvement from EPA's Research and Development Program's partners, which ensures that the EPA's scientific efforts are responsive to today's environmental concerns.

EPA's disaster-related responsibilities are described by the following three objectives in the Homeland Security Research Program (HSRP)'s 2019-2022 StRAP: 1) contaminant characterization and consequence assessment; 2) environmental cleanup and infrastructure remediation; and 3) systems approaches to preparedness and response.

Funding supports EPA in carrying out the primary mission essential functions, including EPA's efforts to help communities prepare for, endure, and recover from disasters – safeguarding their economic, environmental, and social well-being. HSRP collaborates with state, local, and private sector organizations and key federal agencies[15] to prioritize research needs and prevent the duplication of scientific and technical work. HSRP delivers effective tools, methods, information, and guidance to local, state, and federal decision-makers that address both critical terrorism-related issues and natural or manmade disasters.

[15] 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).

EPA also is responsible for operating and maintaining the network of near real-time stationary and deployable 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 Fukushima and is an EPA Critical Infrastructure/Key Resource asset. This monitoring network is supported by the IT system known as ARaDS, Analytical Radiation Data System.

Additionally, EPA serves as the Sector-Specific Agency for the water sector, coordinating water sector-specific risk assessment and management strategies and assessing and mitigating cybersecurity risks with DHS and the sector under Executive Order 13636: Improving Critical Infrastructure Cybersecurity.[16]

Recent accomplishments include:

- **Advancing Preparedness for Foreign Animal Disease Outbreaks:** Proper management of livestock carcasses during large-scale foreign animal disease outbreaks can protect humans, livestock, and wildlife from biological hazards. To effectively respond to large-scale animal mortality incidents, while minimizing potential environmental and economic impacts, HSRP studied various livestock carcass management options and provided decision-making criteria to help manage foreign animal disease outbreaks. Healthy livestock can become infected by inhaling or ingesting foot-and-mouth virus or African swine fever virus released from infected animals or carcasses. Carcasses must be managed immediately after death, otherwise nearby livestock will be exposed, threatening the human food supply. Site-specific conditions affect which of seven management options[17] are most appropriate in the aftermath of a biological incident. HSRP developed a technical report[18] to help make site-specific decisions for dissemination to public health and environmental agencies, animal farmers, veterinarians, and other diverse groups of professionals, which is available online through EPA's science inventory.

- **Improving Drinking Water Infrastructure Capabilities Response to Contamination:** EPA is the lead federal agency responsible for working with water utility companies to protect water distribution systems from contamination. Drinking water distribution systems are vulnerable to intentional or accidental contamination, which presents challenges to maintaining water quality and availability. Decontamination of drinking water systems is critical in ensuring system operation and restoring public confidence in the system's safety. A research concern of EPA is the effect of terrorist anthrax attacks against critical infrastructure, including the drinking water sector. EPA research, under HSRP, examined full-scale decontamination demonstration of drinking water infrastructure after a biological agent contamination event, using a nonpathogenic surrogate for anthrax in collaboration with the U.S. Department of Energy's Idaho National Laboratory. This research

[16] For more information, please see: https://obamawhitehouse.archives.gov/the-press-office/2013/02/12/executive-order-improving-critical-infrastructure-cybersecurity.
[17] Options include: on-site open burning, on-site air-curtain burning, on-site unlined burial, on-site composting, off-site fixed-facility incineration, off-site landfilling, and off-site carcass rendering.
[18] For more information, please see: Exposure Assessment of Livestock Carcass Management Options During a Foreign Animal Disease Outbreak, https://cfpub.epa.gov/si/si_public_record_report.cfm?dirEntryId=342127&Lab=NHSRC.

determined decontamination methodologies best suited for use by water utilities.[19] Effective management of contaminated water is needed to improve emergency response, shorten response time, and improve preparedness.

- **Accelerating Response Time with Effective Waste Management:** Large-scale natural disasters have the potential to generate a significant amount of waste. For example, Hurricane Katrina and the Joplin Missouri tornado resulted in 100 million and 1.5 million cubic yards of waste. Man-made chemical, biological, radiological and nuclear (CBRN) incidents, created by acts of terrorism, war, or accidents, have the potential to generate as much or more hazardous waste. Successful recovery is dependent on effective waste management. The quantification, segregation, transportation, and storage of waste can be an arduous and costly undertaking. For example, following an incident, vehicles will be damaged and/or contaminated to varying degrees and left unattended within the impacted area. The timely removal process may overwhelm local, state, and federal recovery efforts. EPA research identified methods to collect, decontaminate, recycle, or dispose of contaminated vehicles following a wide-area incident in collaboration with federal, state, and local governments, as well as researchers and experts from the automotive recycling, scrap recycling, waste management, and insurance industries.[20] The research results help reduce the cost and time associated with the aforementioned process of removing contaminated vehicles resulting from a wide-area incident.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018 - 2022 EPA Strategic Plan*. This work also is subject to evaluation by the Agency's Board of Scientific Counselors (BOSC), which is an independent expert body that performs evaluations and lends advice on the strategic research planning for EPA's Research and Development Program.

The following work is reflected in the HSRP's Strategic Research Action 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.

Characterizing Contamination and Assessing Consequence. Research on contaminant characterization, coupled with an understanding of exposure potential, can be used to inform the public health consequences of contaminant exposure. HSRP addresses how contaminants behave in water systems and the built and natural environment, including the development of capabilities

[19] For more information, please see: Full-Scale Decontamination of Bacillus Spores from Drinking Water Infrastructure, https://cfpub.epa.gov/si/si_public_record_report.cfm?dirEntryId=345158&Lab=NHSRC&subject=Homeland%20Security%20Research&view=desc&sortBy=pubDateYear&showCriteria=1&count=25&searchall=%27water%20security%27%20AND%20%27biological%27&.

[6] For more information, please see: Management and Disposal of Vehicles Following a Wide Area Incident: Literature Review and Stakeholder Workshop, https://cfpub.epa.gov/si/si_public_record_report.cfm?dirEntryId=345827&Lab=NHSRC&fed_org_id=1253&subject=Homeland%20Security%20Research&view=desc&sortBy=pubDateYear&showCriteria=1&count=25&searchall='indoor%20outdoor%20decontamination.

to support decision makers in their assessment of contamination threats to public health. HSRP will develop contaminant detection, environmental sampling, and analytical capabilities. These research areas provide essential information to support environmental response and remediation decision making to protect public health and the environment. In FY 2021, HSRP will:

- Study the fate of persistent chemical agents and pesticides in porous or permeable materials informing remediation options.
- Conduct studies on biological contaminant fate, transport, and inactivation in water and wastewater systems to inform mitigation decisions.
- Develop biological sample collection methods for environmental matrices and protocols for target biological agent analysis.
- Develop indoor contaminant mapping capabilities for supporting radiological remediation decision making.

Environmental Cleanup and Infrastructure Remediation. EPA has extensive expertise in cleaning up contamination associated with accidental spills and industrial accidents. However, experience in remediating CBRN contamination, released over wide areas, such as outdoor urban centers or impacted water systems, is lacking. Such a release can pose a continual challenge for remediation with long-standing environmental and health consequences. As the lead 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.[21]

EPA research, under HSRP, aims to fill the most critical capability gaps so that EPA can make the most informed mitigation and remediation decisions. HSRP research will focus on: 1) wide-area decontamination research to develop capabilities for addressing hazardous contaminants in the environment, including indoor and outdoor areas, 2) water treatment and decontamination of water systems, and 3) waste management as part of the response and remediation efforts. In FY 2021, HSRP will:

- Develop decontamination methods for biological agent contaminated outdoor surfaces and vehicles.
- Conduct research to test decontamination approaches at the bench, pilot, and the full-scale water security test bed for contaminated drinking water infrastructure.
- Evaluate methods for homeowner decontamination of plumbing and appliances connected to the water distribution system.
- Develop methods to determine water treatment and infrastructure decontamination options for CBR contaminants to assist on-site treatment of CBR contaminated water.
- Develop tools and information to aid in CBR waste and waste water minimization, staging/storage, treatment, transport, and disposal.

System Approaches to Preparedness and Response. Transitioning the research into field ready capabilities involves ensuring that decision makers and responders have knowledge of and access

[21] 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.

to the latest information. Decision makers need access to tools and information built from a systems approach where each of the research areas are brought together through their interdependencies and relative impacts. Priorities for HSRP address the development of systems-based tools by pulling together the connected elements of the research products to provide technical support and decision-support tools and this ensures that information is readily and easily accessible during an emergency. In FY 2021, EPA's HSRP will:

- Conduct a study to develop resilience tools for community and water networks including associated case studies. This study will improve community resiliency to man-made and natural disasters with the ability to respond rapidly.
- Evaluate and develop data management, communication, and characterization for CBRN response and recovery. New emerging technology to the response community will enhance the ability to gather necessary information to make informed decisions and greatly reduce the time necessary to collect information and improve the safety for responders.

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 will provide the Agency, first responders, and the public with greater access to data, and, should there be a radiological emergency, improve officials' ability to make decisions about protecting public health and the environment during and after the incident. Additionally, the data will be used by scientists to better characterize the effect of a radiological incident.

In FY 2021, the Agency will continue to operate the *RadNet* air monitoring network, add exposure rate meter capability to the network, and provide essential maintenance to the network. In order to best maximize resources, monitors will add exposure rate meter capability 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. Fixed stations will operate in conjunction with deployable monitoring assets available during a radiological incident.

Research Planning:

EPA's Board of Scientific Counselors (BOSC) is a federal advisory committee that provides advice and recommendations to EPA on technical and management issues of its research program. The HSRP will meet regularly over the next several years with the BOSC HSRP Subcommittee to seek their input on topics related to research program design, science quality, innovation, relevance, and impact.

The Agency assesses its research performance through the distribution of research evaluation surveys that are distributed to key users of its research products. This provides evidence for how research products are being used, by whom, and the degree of satisfaction product users have with research product quality, usability, and timeliness of delivery. Through the evaluation process, the Agency identifies its strengths and finds targeted areas for improvement to its research programs.

This work supports the long-term performance goal of percent of research products meeting customer needs in the *FY 2018-2022 EPA Strategic Plan*.

EPA's state engagement[22] is designed to inform states about EPA's research programs and role within EPA, and to better understand the science needs of state environmental and health agencies. Key partners at the state level include the Environmental Council of the States—with its Environmental Research Institute of the States and Interstate Technology and Regulatory Council—and the Association of State and Territorial Health Officials, as well as state media associations such as the Association of Clean Water Administrators and the Association of State Drinking Water Administrators.

Performance Measure Targets:

Work under this program supports performance results in the Research: Sustainable and Healthy Communities Program under the S&T appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$731.0) This change is an increase due to the recalculation of base payroll costs.
- (-$361.0) This program change is a decrease in resources for addressing radiological emergency preparedness.
- (+$609.0 / -2.0 FTE) This net program change is a change in resources and FTE for decontamination research.
- (+$970.0 / +5.0 FTE) This program change is an increase in resources and FTE for a focused effort to meet EPA's responsibilities as the water Sector-Specific Agency implementing specific statutory and Presidential directives relating to water security.

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 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.

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

Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$5,755.6	$5,355.0	$4,986.0	-$369.0
Science & Technology	***$410.0***	***$443.0***	***$500.0***	***$57.0***
Building and Facilities	$4,259.1	$6,676.0	$6,176.0	-$500.0
Hazardous Substance Superfund	$979.3	$1,017.0	$915.0	-$102.0
Total Budget Authority	$11,404.0	$13,491.0	$12,577.0	-$914.0
Total Workyears	8.8	9.2	9.2	0.0

Total workyears in FY 2021 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 the capability of EPA's vital laboratory infrastructure assets. Specifically, funds within this appropriation support security needs for the National Vehicle and Fuel Emissions Laboratory (NVFEL).

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*.

In FY 2021, the Agency will continue to provide enhanced physical security for the NVFEL and its employees. This funding supports the incremental cost of security enhancements required as part of an Agency security assessment review.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$57.0) This program change increases resources for infrastructure security at the NVFEL.

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).

IT / Data Management/ Security

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$78,748.7	$80,223.0	$79,064.0	-$1,159.0
Science & Technology	***$3,092.6***	***$3,072.0***	***$2,890.0***	***-$182.0***
Hazardous Substance Superfund	$13,755.5	$13,792.0	$13,874.0	$82.0
Total Budget Authority	$95,596.8	$97,087.0	$95,828.0	-$1,259.0
Total Workyears	391.4	459.4	469.9	10.5

Total workyears in FY 2021 include 172.0 FTE to support 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,[23] EPA National Library Network, and One EPA Web.

The Quality Program provides quality policies and practices intended to ensure all environmentally-related data activities performed by or for the Agency will result in the production of data that are of adequate quality to support their intended uses. The Quality Program provides Quality Assurance (QA) policies, training, oversight, and technical support to assist EPA's programs in implementing quality management systems for all environmental data operations. It also oversees the implementation of EPA's Information Quality Guidelines. The EPA National Library Network provides information resources and services to EPA staff and to the public to support the mission of EPA.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. The Quality Program will continue to provide technical support to all EPA offices and laboratories in implementing EPA quality policies, procedures, and standards. In FY 2021, the Quality Program will conduct one Quality Management Plan review and one Quality System Assessment for selected EPA programs. These oversight activities help ensure the quality of EPA's data for intended uses, including environmental decision-making.

[23] More information about EPA's Quality Program can be found at: http://www.epa.gov/quality.

The Quality Program also will continue using an enterprise QA tracking and reporting IT system, which is expected to be implemented in FY 2020. The enterprise QA tracking and reporting system simplifies, standardizes, and centralizes the QA annual reporting process by providing a mechanism for EPA organizations' quality activities throughout the year. Additionally, the Quality Program will provide oversight of EPA's Information Quality Guidelines and facilitate the development of the Agency's responses to public requests for correction of information disseminated by EPA. 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 access to environmental information 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 2021, EPA will work to transform the Agency's libraries to meet the needs of the 21st Century customer. EPA will streamline library collections and seek to make enhancements to the physical space to improve the customer service experience.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$579.0) This change is an increase due to recalculation of base payroll costs.

- (-$761.0 / -1.5 FTE) This net program change modifies the timeline for development of new technologies to address agency needs such as new assistive technology tools, ability to re-platform legacy applications, and replace end of service IT equipment that provides basic workforce support across the Agency.

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

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$321,500.4	$287,595.0	$317,345.0	$29,750.0
Science & Technology	***$67,856.9***	***$65,372.0***	***$67,908.0***	***$2,536.0***
Building and Facilities	$23,017.8	$26,922.0	$33,377.0	$6,455.0
Leaking Underground Storage Tanks	$847.2	$868.0	$796.0	-$72.0
Inland Oil Spill Programs	$577.3	$665.0	$682.0	$17.0
Hazardous Substance Superfund	$82,243.2	$76,473.0	$76,831.0	$358.0
Total Budget Authority	$496,042.8	$457,895.0	$496,939.0	$39,044.0
Total Workyears	329.9	315.4	307.6	-7.8

Total workyears in FY 2021 include 2.1 FTE to support Facilities Infrastructure and Operations working capital fund (WCF) services.

Program Project Description:

Science & Technology (S&T) resources in the Facilities Infrastructure and Operations Program fund 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, sustainable facilities and energy conservation planning and support, and space planning. Funding for such services is allocated among the major appropriations for the Agency.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, EPA will continue to invest in the reconfiguration of EPA's workspaces, enabling the Agency to release office space and reduce long-term rent costs, consistent with HR 4465,[24] the *Federal Assets Sale and Transfer Act of 2016*. EPA is implementing a long-term space consolidation plan that will reduce the number of occupied facilities, consolidate space within remaining facilities, and reduce square footage wherever practical. EPA also will continue to work to enhance its federal infrastructure and operations in a manner that increases efficiency.[25]

[24] For additional information, please refer to: https://www.congress.gov/bill/114th-congress/house-bill/4465, *Federal Assets Sale and Transfer Act of 2016*.
[25] For additional information, please refer to: https://www.whitehouse.gov/presidential-actions/executive-order-regarding-efficient-federal-operations/, Executive Order 13834 "Efficient Federal Operations". For information on EPA's FY 2018 performance for efficient Federal operations/management, please visit: https://www.sustainability.gov/images/scorecards/epa-scorecard-fy2018.png.

EPA is working toward the long-term performance goal in the *FY 2018 – 2022 EPA Strategic Plan* to reduce unused office and warehouse space by 850,641 square feet nationwide by September 30, 2022. This has the potential to provide a cumulative annual rent avoidance of nearly $28 million across all appropriations. This will help offset EPA's escalating rent and security costs. In FY 2019, EPA released 128,150 square feet of unused office and warehouse space. Planned consolidations in FY 2021 will allow EPA to release an expected 319,693 square feet of space. For FY 2021, the Agency is requesting $27.69 million for rent, $19.78 million for utilities, and $15.16 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.

In FY 2021, the Agency will take aggressive action to reconfigure EPA's workplaces with the goal of reducing long-term rent costs. Space consolidation and reconfiguration enables EPA to reduce its footprint to create a more efficient, collaborative, and technologically sophisticated workplace. EPA will continue to manage lease agreements with GSA and private landlords, and fund costs associated with utilities and building security needs.

Performance Measure Targets:

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

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$2,536.0) This net change to fixed and other costs is an increase due to the recalculation of rent, utilities, security, and transit subsidy.

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: A Cleaner, Healthier Environment
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$55,368.2	$58,753.0	$51,268.0	-$7,485.0
Science & Technology	***$3,098.5***	***$3,154.0***	***$2,443.0***	***-$711.0***
Total Budget Authority	$58,466.7	$61,907.0	$53,711.0	-$8,196.0
Total Workyears	366.4	387.6	416.5	28.9

Total program workyears in FY 2021 include 126.0 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),[26] 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 non-occupational use, EPA must find the pesticide safe. This involves considering cumulative and aggregate risks and ensuring extra protection for children. The Agency must balance the risks and benefits of other uses. For antimicrobial pesticides with public health claims, the EPA requires that manufacturers perform tests to ensure the efficacy (i.e., performance) of products per the labelling.

This program operates two laboratories, the Microbiology Laboratory,[27] and the Analytical Laboratory,[28] 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in the Marketplace in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, the Microbiology Laboratory

[26] On Friday, March 8, 2019, the President signed into law 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.
[27] For additional information, please visit: https://www.epa.gov/aboutepa/about-microbiology-laboratory.
[28] For additional information, please visit: https://www.epa.gov/aboutepa/about-analytical-chemistry-laboratory-acl.

will 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 and new claims for existing products. Specific initiatives for FY 2021 include the following:

- Data collection and analysis on the Organization for Economic Cooperation and Development (OECD) quantitative method for bactericidal claims to support adoption of the method for regulatory purposes, including an analysis of data from the FY 2020 multi-laboratory studies. The method is currently used by EPA to assess performance of antimicrobial products against two major public health pests, *Clostridioides difficile* (C. diff.) and *Candida auris*, and the laboratory is developing data to expand the use of the method for testing other human pathogenic bacteria and viruses including drug resistant strains (e.g., MRSA, human influenza virus).
- Continued development of a method and associated guidance for assessing the effectiveness of *Legionella* in recirculating water for cooling tower remediation. Conduct and coordinate verification studies to confirm the method for evaluation of the performance of antimicrobial products against *Legionella* for decontamination and/or remediation claims.
- Support for the Centers for Disease Control and Prevention (CDC) by generating data on a broad range of product formulations (e.g., antimicrobial wipes and ready-to-use formulations) and active ingredients to inform the CDC and other federal agencies (e.g., Veterans Administration) on options for surface decontamination for the emerging fungus pathogen (*Candida auris*) including the drug resistant strain.
- Posting of the final guidance and standard efficacy method for the registration of copper-containing surface.
- Development of a prototype method for evaluating porous materials found in clinical environments (room separation curtains, vinyl surfaces, etc.)
- Development of the first workplan for comment on the risk-based post-registration efficacy testing program (e.g., surveillance testing of *C. difficile* products) per EPA's response to the Office of the Inspector General (Report No. 16-P-0316).
- Continued posting and maintenance of a website for existing and new antimicrobial test methods and guidance documents.[29]

In FY 2021, 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 Analytical Chemistry 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;
- As needed, 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;

[29] For additional information, please refer to the following website: https://www.epa.gov/pesticide-analytical-methods/antimicrobial-testing-methods-procedures-developed-epas-microbiology.

- Develop protocols and generate data to improve the Office of Pesticide Programs' dietary risk assessment of household antimicrobial disinfectant products that require potable water rinse;
- Provide analytical assistance and technical advice to all regional offices in support of their enforcement cases;
- Verify that antimicrobial pesticides are properly formulated (as requested); and
- Operate EPA's National Pesticide Standard Repository.

Preventing Disease through Public Health Pesticides: Antimicrobial Testing

Antimicrobial pesticides play an important role in public health and safety by killing germs, bacteria, viruses, fungi, protozoa, algae, and slime. Some of these products are used to sterilize hard surfaces in hospitals. Chemical disinfection of hard, non-porous surfaces such as floors, bed rails, and tables is one component of the infection control systems in hospitals, food processing operations, and other places where disease-causing microorganisms, such as bacteria and viruses, may be present. In reviewing registrations for antimicrobials, EPA is required to ensure that antimicrobials maintain their effectiveness.[30]

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 currently in the process of developing a new risk-based testing strategy in response to OIG recommendations made in FY 2016.[31] 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 2022.

Evidence and Evaluation

The Microbiology Laboratory will continue efficacy method development activities to support EPA's antimicrobial pesticide regulatory programs. In support of these efforts, the Microbiology Laboratory submitted several methods for emerging pathogens (*Clostridioidesdifficile* and biofilms) and selected formulation types (towelette) to American Society for Testing and Materials (ASTM) workgroups for technical review in FY 2019. These methods have since been approved by ASTM. The peer-review process provided during the ASTM workgroup meetings helped optimize and improve the clarity of the methods, as well as making the methods more robust and relevant to real-world scenarios. The results of these efforts will help ensure products are available for control of *Clostridioidesdifficile* and biofilms and inform EPA's method development activities in FY 2021 and beyond.

The Analytical Chemistry Laboratory is developing a protocol to measure the residues of pesticides left on a kitchen counter that has been sprayed with an antimicrobial product and followed with a potable water rinse (PWR). This protocol, when approved, will be used by the manufacturers to collect residue data for active ingredients in antimicrobial products with indirect

[30] *See*, FIFRA section 3(h)(3), 7 U.S.C. 136a(h)(3).
[31] For additional information, please visit: https://www.epa.gov/pesticide-registration/antimicrobial-testing-program.

food uses. These data will help the Agency refine its dietary risk assessments, which historically, were based on the assumption of no residue remaining after a PWR.

Through ongoing efficiency reviews of its analytical data processing procedures, the Analytical Chemistry Laboratory has streamlined its analytical data processing procedures by utilizing automated data transfer from the instruments and customized spreadsheets for data reporting. In FY 2021, the Laboratory will continue to identify ways to improve its efficiency, including streamlining data review processes according to the ISO 17025 guidelines, using electronic media to store analytical data, and establishing a laboratory LAN. By identifying efficiencies in the analytical processing procedures, the Laboratory expects to reduce turn-around time and errors commonly seen with manual data processing, thus providing the Agency with more timely, traceable, and accurate data for use in assessing risks of pesticides to human health and the environment.

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 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$16.0) This change is an increase due to the recalculation of base payroll costs.

- (-$727.0) This net program change is a reduction in funding for pesticide program activities from annual appropriations with the intent to increase utilization of pesticide user fee collections.

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: A Cleaner, Healthier Environment
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$39,444.2	$38,966.0	$32,100.0	-$6,866.0
Science & Technology	***$2,415.8***	***$2,327.0***	***$2,616.0***	***$289.0***
Total Budget Authority	$41,860.0	$41,293.0	$34,716.0	-$6,577.0
Total Workyears	295.3	249.6	268.4	18.8

Total program workyears in FY 2021 include 85.0 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

Program Project Description:

In compliance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA),[32] EPA conducts risk assessments using the latest scientific methods to determine the risks that pesticides pose to human health and the ecological effects on plants, animals, and ecosystems that are not the targets of the pesticide. The Agency's significant regulatory decisions are posted for review and comment to ensure that these actions are transparent, and to allow stakeholders, including at-risk populations, to be engaged in decisions that affect their environment.

EPA's Pesticide Program operates two laboratories, the Microbiology Laboratory[33] and the Analytical Laboratory,[34] that support the goal of protecting human health and the environment through diverse analytical testing, and analytical method development and validation efforts. These laboratories will continue to provide a variety of technical services to EPA, other federal and state agencies, tribal nations, and other organizations to ensure the protection of the environment from pesticide risk.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.4 Ensure Safety of Chemicals in the Marketplace in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, EPA must determine that food and residential uses of pesticides are safe. For other risk concerns, EPA must balance the risks of the pesticides with benefits provided from the use of the product. To avoid unreasonable risks, EPA may impose risk mitigation measures such as modifying use rates or application

[32] *See*, FIFRA, Sections 2 and 3, Definitions, Registration of Pesticides (7 U.S.C. §§ 136, 136a). Available online at: https://www.epa.gov/laws-regulations/summary-federal-insecticide-fungicide-and-rodenticide-act. Section 3(c)(5) of FIFRA states that the Administrator shall register a pesticide if it is determined that, when used in accordance with labeling and common practices, the product "will also not generally cause unreasonable adverse effects on the environment." FIFRA defines "unreasonable adverse effects on the environment", as "any unreasonable risk to man or the environment, considering the economic, social, and environmental costs and benefits of the use of any pesticide."
[33] For additional information, please visit: https://www.epa.gov/aboutepa/about-microbiology-laboratory.
[34] For additional information, please visit: https://www.epa.gov/aboutepa/about-analytical-chemistry-laboratory-acl.

methods, restricting uses, or denying some or all uses. In some regulatory decisions, EPA may determine that uncertainties in the risk determination need to be reduced and may require monitoring of environmental conditions, such as effects on water sources, development of new, standardized methodologies, or the development and submission of additional laboratory or field study data by the pesticide registrant.

In addition to FIFRA responsibilities, the Agency has responsibilities under the Endangered Species Act (ESA).[35] 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 ESA standard.

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 in the environment.

In FY 2021, 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, etc., can be devastating to 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 in the field, the response to an animal pathogen outbreak and submission of requests under FIFRA Section 18 to address these outbreaks relies 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 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 the development of new antimicrobial products following contemporary regulatory requirements.

In FY 2021, 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

[35] *See*, 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: http://www.fws.gov/endangered/laws-policies/section-7.html.

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 Laboratory also will continue to support pesticide registration review by evaluating the accuracy and precision of sulfuryl fluoride detection devices used to detect the presence of a fumigant prior to re-entry. In addition, the Laboratory will continue to review the effectiveness of a potable water rinse at removing residues of antimicrobial active ingredients from different surface types in an effort to refine the exposure estimates used in risk assessments for these active ingredients. Finally, in FY 2021, the Analytical Chemistry Laboratory 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 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$36.0) This change is a decrease due to the recalculation of base payroll costs.
- (+$325.0) This change is an increase in laboratory operation 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: A Cleaner, Healthier Environment
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$7,193.6	$7,722.0	$6,014.0	-$1,708.0
Science & Technology	***$354.6***	***$405.0***	***$684.0***	***$279.0***
Total Budget Authority	$7,548.2	$8,127.0	$6,698.0	-$1,429.0
Total Workyears	31.9	35.8	46.3	10.5

Total program workyears in FY 2021 include 10.5 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

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 Laboratory[36] and the Analytical Chemistry Laboratory,[37] that support the goal of protecting human health and the environment through diverse analytical testing and analytical method development, and validation efforts.

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*, which collects and maintains pesticide standards (*i.e.*, samples of pure active ingredients or technical grade active ingredients, regulated metabolites, degradates, and related compounds).

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.

[36] For additional information, please visit: https://www.epa.gov/aboutepa/about-microbiology-laboratory.
[37] For additional information, please visit: https://www.epa.gov/aboutepa/about-analytical-chemistry-laboratory-acl.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.4 Ensure Safety of Chemicals in the Marketplace in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, EPA will realize the benefits of pesticides by ensuring the continued operation of the National Pesticide Standard Repository. The Laboratories 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).

In FY 2021, the Microbiology Laboratory will continue to evaluate FIFRA Section 18 emergency exemptions and novel protocol requests for new uses and novel pathogens. The Laboratory 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 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 2021.

The Analytical Chemistry Laboratory will continue its work in developing and validating multiresidue methods using state-of-the-art methodology and instrumentation; in providing chemical analysis for assessing risk to human health and to the environment from agricultural use of pesticides; and in providing technical support to all EPA regions to ensure that pesticide products are formulated according to approved labels.

The Microbiology Laboratory will continue to refine and develop methods to support EPA's Section 3 and Section 18 regulatory programs. In FY 2019, in support of these efforts, the Laboratory expanded the scope of porous materials (e.g., wood, concrete, rubber etc.) used in a new quantitative efficacy test method to enable the U.S. Department of Agriculture (USDA) to evaluate chemicals against new high consequence animal pathogens (e.g., Newcastle disease virus) on hard and porous surfaces. The results of USDA's use of the method will help inform EPA's method development activities for other emerging and high consequence pathogens in FY 2021 and beyond.

The Analytical Chemistry Laboratory maintains EPA's *National Pesticide Standard Repository* pursuant to 40 CFR part 158. This laboratory collects and maintains an inventory of analytical standards of registered pesticides in the United States, as well as some that are not currently registered. EPA provides the 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 is approximately 15 working days. Using the results of the efficiency review, in FY 2021 and beyond, the Analytical Chemistry Laboratory will implement procedural changes to identify areas for improvement and reduce the turnaround time to 12 days (for those pesticide

standard requests that are not complicated and/or standards that are not expiring) to help federal agencies, states, and tribes laboratories expedite enforcement efforts.

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 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$292.0) This change is an increase due to the recalculation of base payroll costs.

- (-$13.0) This program change is a slight decrease in funding for pesticide laboratory operations and maintenance activities.

Statutory Authority:

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

Research: Air and Energy

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Science & Technology	***$85,895.8***	***$94,496.0***	***$33,543.0***	***-$60,953.0***
Total Budget Authority	$85,895.8	$94,496.0	$33,543.0	-$60,953.0
Total Workyears	252.8	258.0	153.8	-104.2

Program Project Description:

The Air and Energy (A-E) Research Program provides scientific information to EPA program and regional offices, states, tribes, and other stakeholders. A-E strives to advance the science needed to achieve clean air and attain the National Ambient Air Quality Standards[38] (NAAQS), which will protect human health and ecosystems throughout the Nation.

The A-E Research Program is one of six integrated and transdisciplinary research programs in the Research and Development Program. Each of the six integrated and transdisciplinary research 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 implemented with their active collaboration and involvement. As part of the FY 2021 Budget, the new A-E FY 2019-2022 StRAP builds upon prior A-E StRAPs and continues a practice of conducting innovative scientific research aimed at solving the problems encountered by Agency partners and stakeholders.

The resources requested for A-E will support the analysis of research data, as well as the publication of scientific journal articles to disseminate findings from prior EPA research related to air quality, its impacts to health and the environment, and resilience. The A-E Research Program also will offer critical support to provide essential science and tools for policy decisions and public awareness on the following research topics: science for air quality decisions, extreme events and emerging risks, and next-generation methods to improve public health and the environment. The A-E Research Program relies on successful partnerships with others, including academic and industry researchers, states, local and private sector organizations, as well as key federal agencies.

[38] 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.

Recent Accomplishments of the A-E Research Program include:

- **Smoke from Wildland Fires:** EPA conducts research on emissions and air quality impacts from wildland fires. Timely communication of health risks and health protective actions during wildland fire smoke events also is a commitment for EPA. The interagency Wildland Fire Sensors Challenge[39] involved coordination across multiple agencies and states to stimulate innovation in the development of multipollutant sensors that can operate in wildfire conditions. Winners of the challenge were announced in September 2018; and in 2019, EPA evaluated the winning prototype sensors for their performance compared to regulatory-grade instruments. The Smoke Sense Project[40] (which includes a mobile app, a web-based data visualization tool, and scientific analyses of citizen science generated data) is providing valuable insights into where and when people are exposed to wildfire smoke, the health symptoms they experience, and the types of behaviors they engage in to reduce exposures. This effort has engaged over 30,000 citizen scientists from all 50 states. In 2019, EPA also began a collaboration with the Missoula City-County Health Department in Montana and the Hoopa Valley Tribe in California on a research study to evaluate how air-handling systems can reduce indoor exposure to wildfire smoke and a laboratory study on the efficacy of various portable air cleaners during smoke episodes.

- **Sensor Technology:** EPA conducts a wide range of research that involves the discovery, evaluation, and the direct integration of novel or experimental air quality monitoring technology. A wide range of stakeholders have benefited directly from EPA's sensor research. For example, Agency staff rely on information sharing, performance evaluation consultation, and the implementation of new technologies whose purposes range from citizen science to environmental assessment. State agencies often rely upon A-E to provide technical knowledge on the use of emerging air quality technologies. Sensor manufacturers regularly consult with A-E on sensor research progress, interactions that were facilitated by public workshops[41] in 2018 and 2019. As of 2019, EPA's Regional Applied Research Efforts[42] and Regional-State-Tribal Innovation[43] programs funded sensor projects in California, Washington, North Carolina, Georgia, and Florida, as well as states in EPA Region 5. Through the Science to Achieve Results (STAR) Program, EPA funded six 'Air Pollution Monitoring for Communities' grants[44] to research organizations working with communities in five states and the Yakima Nation to set up sensors to monitor local air quality. To enable broader use of sensors, EPA will develop guides for ensuring data quality, evaluating sensor performance, and approaching sensor data management, while engaging with stakeholders to ensure the guides meet their needs.

[39] For more information, please see: https://www.epa.gov/air-research/winners-wildland-fire-sensors-challenge-develop-air-monitoring-system-prototypes.
[40] For more information, please see: https://www.epa.gov/air-research/smoke-sense-study-citizen-science-project-using-mobile-app.
[41] For more information, please see: https://www.epa.gov/air-research/deliberating-performance-targets-air-quality-sensors-workshops.
[42] For more information, please see: https://www.epa.gov/sites/production/files/2013-12/documents/rare-201304.pdf.
[43] For more information, please see: https://www.epa.gov/innovation/science-innovation.
[44] For more information, please see: https://cfpub.epa.gov/ncer_abstracts/index.cfm/fuseaction/recipients.display/rfa_id/587.

- **Perfluoroalkyl and polyfluoroalkyl substances (PFAS) Research:** In April 2019, the New Hampshire Department of Environmental Services released a report[45] summarizing the 2018 results for PFAS analyses performed by EPA. The Research and Development Program evaluated the initial steps toward developing a method to sample for the presence of PFAS compounds from air emission sources. Field testing was conducted at a site in New Hampshire and confirmed at least 12 different PFAS compounds in the emission source. EPA researchers are continuing work with states and other agencies to improve the technique and to enable emissions to be quantified with greater confidence in support of efforts to identify and reduce PFAS emissions into the atmosphere. For example, emissions testing and analysis of a soil incineration process are planned in collaboration with the Department of Defense in Alaska for 2019 through 2021.

- **Community Multi-Scale Air Quality Model (CMAQ) Update:[46]** EPA released a publicly available, updated version of the CMAQ on August 28, 2019. A beta version of the new version was released earlier in 2019. Since its inception in 1998, CMAQ has been updated regularly to incorporate new science as it emerges. CMAQ is used to evaluate potential air quality policy management decisions and is currently used by 27 states[47] to develop strategies to meet the NAAQS. The newest version was recently peer reviewed and will have an emphasis on understanding background contribution of particulate matter and ground level ozone, improved real-world treatment of organic aerosol formation, and will allow integration with other modeling systems to understand multimedia interactions between atmosphere, land, and water. In FY 2020, CMAQ developers will incorporate updates to allow users to more accurately target emissions reductions to meet air quality standards that protect human health and the environment and help understand the impacts of extreme events such as wildland fires.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in the *FY 2018 – 2022 EPA Strategic Plan.* In FY 2021, the A-E Research Program will continue research in areas that support EPA's mission to protect human health and the environment, fulfill the Agency's legislative mandates, advance cross-agency priorities, and provide research and scientific analyses to inform policymaking.

The A-E Research Program prioritizes key activities to support attainment of the NAAQS and implementation of stationary and mobile source regulations, as well as national and multi-state programs. The A-E Research Program continues to develop, evaluate, and apply methods and models to support air quality management programs and provides foundational science to inform decision making. In addition, critical work on PFAS research will be conducted which supports the FY 2020 – 2021 PFAS Agency Priority Goal.

[45] For more information, please see: https://www4.des.state.nh.us/OneStopPub/Air/330110016504192019TypeCR.pdf.
[46] For more information, please see: https://www.epa.gov/cmaq.
[47] AK, CA, CO, CT, GA, ID, IL, IA, KS, KY, MD, MA, MO, MT, NV, NH, NJ, NM, NY, NC, ND, RI, TN, TX, UT, VA, WY.

In FY 2021, the A-E Research Program will continue to:

- Deliver state-of-the-art tools for states and tribes to use in identifying effective emission reduction strategies to meet NAAQS and enhance air quality measurement methods used to ascertain compliance with the NAAQS.

- Assess human and ecosystem exposures and effects associated with air pollutants on individual, community, regional, national, and global scales.[48]

- Develop and evaluate approaches to prevent and reduce pollution, particularly sustainable, cost-effective, and innovative multi-pollutant and sector-based approaches.

- Provide human exposure and environmental modeling, monitoring, metrics, and information needed to inform air quality decision making at the federal, state, tribal, and local level.

- Ensure that the program and regional information needs guide research that will advance EPA's capabilities and understanding of air pollution sources, fate and transport, and effects.

- Address emerging areas of concern to EPA and state policymakers, including PFAS, ethylene oxide, and wildland fires.

- Measure progress toward environmental health goals and translate research results to inform communities and individuals about measures that can be taken to reduce the impacts of air pollution.

- Analyze existing data from EPA on air quality, its impacts to health and the environment, and research to adapt to and prepare for extreme events and environmental change.

Research Planning:

EPA's Board of Scientific Counselors (BOSC) is a federal advisory committee that provides advice and recommendations to EPA on technical and management issues of its research programs. The A-E Research Program will continue to meet regularly over the next several years with the BOSC A-E subcommittee to seek input on topics related to research program design, science quality, innovation, relevance, and impact.

The Agency assesses its research performance through the distribution of research evaluation surveys to key users of its research products. This provides evidence for how research products are being used, by whom, and the degree of satisfaction product users have with research product quality, usability and timeliness of delivery. Through the evaluation process, the Agency identifies its strengths and finds targeted areas for improvement to its research programs.

[48] 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.

EPA's state engagement[49] 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. Key partners at the state level include: the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council; the Association of State and Territorial Health Officials; as well as state media associations, such as the National Association of Clean Air Agencies.

Performance Measure Targets:

Work under this program supports performance results in the Research: Safe and Sustainable Water Resources Program under the S&T appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$1,465.0) This change is an increase due to the recalculation of base payroll costs.
- (-$34,383.0 / -61.7 FTE) This net program change prioritizes research needed to achieve clean air and attain the NAAQS.
- (-$17,535.0 / -42.5 FTE) This program change eliminates climate change research.
- (-$10,500.0) This program change prioritizes intramural activities over extramural activities by eliminating funding for the Science to Achieve Results (STAR) Program.

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.

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

Research: Safe and Sustainable Water Resources

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Science & Technology	***$100,123.7***	***$110,890.0***	***$78,948.0***	***-$31,942.0***
Total Budget Authority	$100,123.7	$110,890.0	$78,948.0	-$31,942.0
Total Workyears	343.4	358.1	268.9	-89.2

Program Project Description:

The Safe and Sustainable Water Resources (SSWR) Research Program develops cost-effective, innovative solutions to current, emerging, and long-term water resource challenges for complex chemical and microbial contaminants. SSWR research targets foreseen, immediate needs and builds capacity for future capabilities for emergency response science, technical support, and anticipatory research. The SSWR Research Program takes an integrated approach that evaluates the entire water cycle. It produces robust research and scientific analysis for decision-making and inventive, practical solutions for partners and stakeholders.[50] This work yields innovative tools and information needed to protect and restore America's watersheds, aquatic ecosystems, and water infrastructure.

The SSWR Research Program is one of six integrated and transdisciplinary research programs in the Research and Development Program. Each of the six integrated and transdisciplinary research 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 implemented with their active collaboration and involvement. As part of the FY 2021 Budget, the new SSWR FY 2019-2022 StRAP builds upon prior SSWR StRAPs and continues a practice of conducting innovative scientific research aimed at solving the problems encountered by Agency partners and stakeholders.

Recent Accomplishments of the SSWR Research Program include:

- **Cyanobacteria Assessment Network Application (CyAN app):**[51] CyAN app (released in August 2019) aids local and state water quality managers to make faster and better-informed management decisions related to cyanobacterial blooms using mobile devices. It provides an easy-to-use and customizable interface for accessing algal bloom satellite data for over 2,000 of the largest lakes and reservoirs in the United States. The CyAN app can be used to scan water bodies for changes in cyanobacteria occurrence without requiring

[50] For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.
[51] For more information, please see: https://www.epa.gov/water-research/cyanobacteria-assessment-network-mobile-application-cyan-app.

computer programming expertise, allowing users to quickly make informed decisions regarding recreational and drinking water safety. The research that led to the development of the CyAN app was conducted in collaboration with the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration, and the U.S. Geological Survey (USGS).[52]

- **Contaminants of Emerging Concern (CECs):**[53] Wastewater treatment plant effluents contain traces of chemicals that escape the wastewater treatment process. These contaminants, including per- and polyfluoroalkyl substances (PFAS) and pharmaceuticals, can potentially persist downstream, ending up in drinking water sources. The potential risks are not yet clearly understood. SSWR researchers have and continue to conduct studies to monitor the occurrence of these CECs in wastewater, surface waters, groundwater, and drinking water, with some studies being done in collaboration with the USGS. The combined research efforts of EPA and USGS in FY 2018 produced a data set of approximately 700 chemically-characterized CECs and identified a group of the most highly contaminated watersheds that may have been impacted by wastewater. SSWR's continued research efforts to monitor the potential effects of these chemical mixtures will increase our understanding of wastewater effluent impacts on human and aquatic health and help to prioritize future research on developing solutions, as necessary, for the removal of CECs in wastewater treatment operations.

- **Rapid *E. coli* Detection at Beaches Improves Public Health Protection:**[54] The development and application of *E. coli* qPCR[55] method provides same-day notification of fecal contamination at beaches, allowing state agencies and beach managers to make rapid decisions on beach closures.[56] In October 2019, EPA provided training and technical assistance on the *E. coli* qPCR method to multiple state water quality laboratories in Michigan, and assisted EPA's Water Program and the Michigan Department of Environment, Great Lakes, and Energy in developing Beach Action Values[57] for the *E. coli* qPCR method. The State of Michigan implemented the Beach Action Values during the 2019 beach season.

- **New PFAS Analytical Method:**[58, 59] In June 2019, EPA completed a multiple laboratory validation study for a new PFAS analytical method (SW-846 Method 8327) for the rapid analysis of 24 PFAS in groundwater, surface water, and wastewater.

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[52] For more information, please see: https://www.epa.gov/water-research/cyanobacteria-assessment-network-cyan.
[53] For more information, please see: epa.gov/water-research/determining-prevalence-contaminants-treated-and-untreated-drinking-water.
[54] For more information, please see: https://www.epa.gov/cwa-methods/other-clean-water-act-test-methods-microbiological.
[55] Quantitative Polymerase Chain Reaction Assay (qPCR) is a laboratory technique of molecular biology based on the polymerase chain reaction. It monitors the amplification of a targeted DNA molecule during the PCR, not at its end, as in conventional PCR. For more information, please see: https://www.epa.gov/sites/production/files/2019-03/documents/method_1697_draft_2019.pdf.
[56] EPA's 2012 Recreational Water Quality Criteria established criteria to protect the public from exposure to fecal contaminants at beaches. For more information, please see: https://www.epa.gov/wqc/recreational-water-quality-criteria-and-methods.
[57] For more information, please see: https://www.epa.gov/sites/production/files/2014-07/documents/beach-guidance-final-2014.pdf.
[58] For more information, please see: https://www.epa.gov/hw-sw846/validated-test-method-8327-and-polyfluoroalkyl-substances-pfas-using-external-standard.
[59] For more information, please see: https://www.epa.gov/hw-sw846/sw-846-update-vii-announcements.

- **Stormwater Contaminants:**[60] A nationwide assessment of contaminants in urban storm water runoff, in collaboration with USGS, was completed in September 2019 for the benefit of states, cities, municipalities, and water utilities.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, the SSWR Research Program's work will focus explicitly on informing EPA's implementation of key environmental regulations by leveraging research in the areas of nutrients, harmful algal blooms, watersheds, and water infrastructure (including water reuse).

SSWR work also supports performance results in Goal 1: A Cleaner, Healthier Environment in the *FY 2018 – 2022 EPA Strategic Plan*. SSWR primarily supports clean and safe drinking water, but also supports efforts to: improve air quality through work on nitrogen, phosphorus, and wildland fires; revitalize land and prevent contamination through work on biosolids and groundwater; and ensure safety of chemicals through research on PFAS and other contaminants like lead.

SSWR work also supports Goal 2: More Effective Partnerships. EPA works closely with states and tribes to understand their water resource challenges, which are reflected in SSWR's research priorities.

In FY 2021, the SSWR Research Program will continue to:

- Assist states, communities, and utilities in addressing stormwater and wastewater infrastructure needs through applied models and technical assistance and develop risk assessments on stormwater capture for enhanced aquifer recharge.

- Work with EPA program offices, regions, and states to develop methods for collection, extraction, characterization, quantification, and evaluation of microplastics in surface water and sediments. These standard methods will allow comparability across studies, aid in comprehensive exposure assessment and risk characterization of microplastics, and, if necessary, support evaluation of effectiveness of approaches, products, and technologies used to prevent plastics from entering aquatic systems.

- Research and provide technical support to deliver safe drinking water. Efforts will focus on the complete water cycle including protecting source waters and wetlands to improving drinking water and wastewater infrastructure and management. Research will assess the distribution, composition, and potential health risks of known and emerging chemical and biological contaminants.

- Improve methods for rapid and cost-effective monitoring of waterborne pathogens in recreational waters. For example, improving rapid low-cost methods for real time

[60] For more information, please see: https://pubs.acs.org/doi/10.1021/acs.est.9b02867.

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.

- Investigate health impacts from exposure to harmful algal/cyanobacteria toxins, and develop innovative methods to monitor, characterize, and predict blooms for early action.

- Support states in prioritizing watersheds for nutrient management and in setting water quality and aquatic life thresholds. These research and communication efforts will help states verify whether investments in implementing nutrient reduction management practices achieve their predicted benefits.

- Provide water reuse research support for safe, fit-for-purpose potable and non-potable use by states.

In addition to the activities listed above, EPA also conducts 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 in understanding and managing risks associated with these chemicals. A significant challenge for risk managers at the 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. Within the SSWR Research Program, EPA is: (1) developing and validating standard methods for measuring different PFAS chemicals in water; (2) reviewing available literature on effectiveness and cost data for different water treatment technologies applied to different PFAS chemicals; and (3) 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.[61] This work supports the FY 2020 – 2021 PFAS Agency Priority Goal (APG).

- **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.[62] In response to overwhelming scientific consensus and continued public health concern, reducing childhood lead exposure is one of the highest priorities for EPA.[63] SSWR research focuses on: (1) establishing reliable models for estimating lead exposure from drinking water; (2) developing improved sampling techniques and strategies for identifying and characterizing lead in plumbing materials, including lead service lines; (3)

[61] For more information, please see: https://iaspub.epa.gov/tdb/pages/general/home.do#content.
[62] For more information, please see: https://www.cdc.gov/nceh/lead/prevention/blood-lead-levels.htm.
[63] For more information, please see: https://www.epa.gov/lead.

developing guidance on optimizing lead mitigation strategies; and (4) 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. This work supports the FY 2020 – 2021 Lead APG.

- **Excessive Nutrients:** The challenge of excessive nutrients is one of the most common water quality problems facing the United States, with potential consequences for human and animal health and economic prosperity.[64] EPA research comprehensively addresses the problems of excess nutrients in water bodies, including harmful algal blooms (HABs). The overall impact of this research will be to provide information and tools that can be used by EPA's Water Program, Air and Radiation Program, and regions as well as states, tribes, and local communities. Information and tools can be used to: detect HABs and mitigate exposure to HABs via predictive modeling and treatment; determine nutrient-related impacts in watersheds and water bodies across multiple scales; apply best practices for nutrient management; and monitor the effectiveness of those practices and evaluate their efficacy. Resources requested in FY 2021 provide scientific and research support to the multi-office initiative to reduce and better predict harmful algal blooms, including tool development for market-based approaches and pilot projects to reduce exposure and toxic events that include predictive modeling and monitoring.

Research Planning:

EPA's Board of Scientific Counselors (BOSC) is a federal advisory committee that provides advice and recommendations to EPA's Research and Development Program on technical and management issues of its research programs. The SSWR Research Program and the BOSC SSWR subcommittee will continue to meet regularly over the next several years to seek input on topics related to research program design, science quality, innovation, relevance, and impact.

The Agency assesses its research performance through the distribution of research evaluation surveys to key users of its research products. This provides evidence for how research products are being used, by whom, and the degree of satisfaction product users have with research product quality, usability, and timeliness of delivery. Through the evaluation process, the Agency identifies its strengths and finds targeted areas for improvement to its research programs.

EPA's state engagement[65] 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. Key partners at the state level include: the Environmental Council of the States, with its Environmental Research Institute of the States and Interstate Technology and Regulatory Council; the Association of State and Territorial Health Officials; as well as state media associations, such as the Association of Clean Water Administrators and the Association of State Drinking Water Administrators.

[64] For more information, please see: https://www.epa.gov/nutrientpollution/problem.
[65] For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

Performance Measure Targets:

(PM RD1) Percentage of Office of Research and Development (ORD) research products meeting customer needs.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					No Target Estab-lished	77	80	82	Percent
Actual					77	79			
Numerator					171	154			Products
Denominator					222	196			

Work under this program supports performance results in the Surface Water Protection Program under the EPM appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$2,744.0) This change is an increase due to the recalculation of base payroll costs.

- (+$2,500.0) This increase supports research and technical assistance regarding lead issues and contributes to the Lead Exposure Reduction Initiative focus area. This work will be guided by the *Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts*, as well as related activities in the 2019-2022 StRAPs and the FY 2020-2021 Lead APG.

- (+$236.0 / +0.5 FTE) This increase for the PFAS focus area includes resources and FTE to support science and research to advance implementation of the PFAS Action Plan and associated milestones in support of the new FY 2020-2021 PFAS APG.

- (+$3,344.0 / +2.0 FTE) This increase of resources and FTE provides scientific and research support to the multi-office focus area to reduce and better predict harmful algal blooms, including tool development for market-based approaches and pilot projects that include predictive modeling and monitoring to reduce exposure and toxic events.

- (-$10,718.0 / -34.9 FTE) This net program change streamlines funding for research related to: technical and site-specific support; communication and technology transfer efforts; translation of nutrient modeling and monitoring data; and research on assisting states in prioritizing watersheds and differentiating sources of nutrient overloading.

- (-$23,448.0 / -56.8 FTE) This program change: refocuses resources from research on recovering resources (e.g., nutrients) from wastewater, transformative water systems and life cycle analysis, and research on advancing water systems technologies; streamlines research on innovative monitoring systems for drinking water treatment (e.g., bioassays), small system drinking water treatment, and unregulated disinfection by-products; and reduces research support for EPA's program offices and states, including work to assist communities in prioritizing infrastructure improvements.

- (-$6,600.0) This program change prioritizes intramural activities over extramural activities by eliminating funding for the Science to Achieve Results (STAR) Program for FY 2021.

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
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Prioritize Robust Science

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Science & Technology	***$135,083.1***	***$132,477.0***	***$58,597.0***	***-$73,880.0***
Leaking Underground Storage Tanks	$130.5	$320.0	$304.0	-$16.0
Inland Oil Spill Programs	$599.6	$664.0	$522.0	-$142.0
Hazardous Substance Superfund	$11,004.7	$16,463.0	$11,448.0	-$5,015.0
Total Budget Authority	$146,817.9	$149,924.0	$70,871.0	-$79,053.0
Total Workyears	411.9	421.8	294.6	-127.2

Program Project Description:

EPA's Sustainable and Healthy Communities (SHC) Research Program conducts research to support community-based solutions to environmental stressors, management of solid waste, clean-up of contaminated sites, and regulatory activities. SHC provides technical support at federal, tribal, or state-led contaminated site clean-ups and during environmental emergencies. SHC's research products emphasize the interrelationships between socio-economic, human health, and environmental factors. Program scientists conduct health, environmental engineering, and ecological research and translate results into tools for localities throughout the United States to facilitate regulatory compliance and improve environmental and health outcomes. These tools aim to minimize negative unintended consequences to human health and the environment and promote more robust and efficient infrastructure in built and natural environments.

The SHC Research Program is one of six integrated and transdisciplinary research programs in the Research and Development Program. Each of the six integrated and transdisciplinary research 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 implemented with their active collaboration and involvement. As part of the FY 2021 Budget, the new SHC FY 2019-2022 StRAP builds upon prior SHC StRAPs and continues a practice of conducting innovative scientific research aimed at solving the problems encountered by Agency partners and stakeholders.

Recent Accomplishments of the SHC Research Program include:

- **Publication of "Ingestion of Soils and House Dusts by Children: The Role of Chemical and Non-chemical Stressors in Determining the Bioaccessibility of Sorbed Organics" (February 2019):**[66] Following soil and dust ingestion, the bioaccessibility (percent mobilization) of sorbed organic toxicants determines the amount of chemical that is

[66] For more information, please see: https://www.sciencedirect.com/science/article/pii/S0045653518320666?via%3Dihub.

available for uptake into the circulatory system. Previous bioaccessibility estimates used by the Agency assume all organics are released into the body; however, empirical results suggest that this may result in an overestimation of dose. This research evaluated different types of soils, dusts, and organics to estimate bioaccessibility under different exposure conditions and to reduce uncertainty in bioaccessibility calculations to improve exposure and risk assessment estimates.

- **Development of an Application Programming Interface for an Environmental Material Flow Accountability Model to Support Multi-Scale Life Cycle Assessments (September 2019):**[67] The U.S. Environmentally-Extended Input-Output (USEEIO) model is a national model for calculating direct and indirect environmental and socioeconomic impacts of U.S. goods and services. This research provides better automation of the creation, update, and assembly of model components for the national and state models. USEEIO provided access for states and others to underlying state model components and code to enable customization and those model components are used in EPA web applications like the Sustainable Materials Management Tool Suite and in other external applications.

- **CDDPath: A Method for Quantifying the Loss and Recovery of Construction and Demolition Debris (CDD) in the United States (February 2019):**[68] CDDPath incorporates the best available data and represents the first known method for estimating final disposition of CDD materials in the Nation. CDD represent a large fraction of U.S.-generated waste sent to landfills, the sheer mass and variety of which warrant special attention. Sustainable materials management approaches seek to minimize landfilling of such waste (e.g., through reuse or recycling) and to manage the toxicity of what must be landfilled. A strong understanding of the waste's amount and composition, as well as the usual end-of-life management pathways, is critical to developing an effective plan in managing it effectively and sustainably.

- **Long-Term in Situ Reduction in Soil Lead Bioavailability Measured in a Mouse Model:**[69] This is one of a series of peer-reviewed published reports on bioavailability and soil amendments published by EPA in 2019. Contaminated site remediation currently involves soil removal and replacement with clean topsoil, which is expensive and difficult at contaminated sites. Adding soil amendments that combine with lead in soil so that the human body cannot absorb the lead can be a cost-effective way to reduce human health risks associated with continued presence of the contaminant. This research showed that the addition of phosphate and iron to contaminated soil significantly reduced soil lead bioavailability 16 years after the original soil treatment, showing that soil amendments can be a long-lasting, low-cost method of reducing toxic exposure to lead. This assessment used a low cost, rapid bioavailability method developed and validated by EPA to produce these results.

[67] For more information, please see: https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryId=347251&Lab=NRMRL; https://github.com/USEPA/Federal-LCA-Commons-Elementary-Flow-List.
[68] For more information, please see: https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NRMRL&dirEntryId=344639.
[69] For more information, please see: https://doi.org/10.1021/acs.est.8b04684.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in the *FY 2018 – 2022 EPA Strategic Plan* and the recommendations of the Superfund Task Force of July 2017.[70] The program provides science that supports EPA's FY 2020-2021 Agency Priority Goal (APG) to accelerate the pace of Superfund and brownfields cleanups and return sites to beneficial use in their communities. These efforts support regulatory activities and protocol development for EPA's Land and Emergency Management Program, EPA's regional offices, and state-delegated programs. EPA research under SHC will provide technical support at federal-, tribal-, and state-managed cleanup sites, and assistance during emergencies.

SHC's FY 2021 research will focus on three topic areas: (1) Contaminated Sites, (2) Waste and Sustainable Materials Management, and (3) Healthy and Resilient Communities. This research will integrate and translate public health, environmental engineering, and ecosystem science to provide:

- Remediation solutions though permanent remedies and innovative treatment technologies for returning contaminated sites to safe and productive use;
- Operational tools for waste sites and for sustainable materials management; and
- Approaches for revitalizing communities impacted by contamination and natural disasters.

The SHC Research Program provides state-of-the-science methods, models, tools, and technologies that the Land and Emergency Management Program uses in programmatic guidance and that EPA decision makers use in the site cleanup process. These tools 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.

Specifically, in FY 2021, SHC will work in the following areas:

- **Waste and Sustainable Materials Management:** EPA research under SHC's Waste and Sustainable Materials Management aims to strengthen the scientific basis for the United States' materials management decisions and guidance. Primary research efforts will focus on developing lifecycle-based assessment tools for sustainable materials management, evaluating the use of landfills 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 are an agencywide initiative on Improving the U.S. Recycling System and Reducing Food Loss and Waste.

- **Remediation, Restoration, and Revitalization:** 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 in socio-

[70] For more information, please see: https://www.epa.gov/superfund/superfund-task-force-recommendations.

ecological systems, 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 partners and stakeholders, states, and tribes to optimize health and well-being outcomes while minimizing unintended consequences.

- **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 in understanding and managing risks associated with these chemicals. A significant challenge for risk managers at the state and local level is how to remove or treat PFAS at sites contaminated through: 1) the use of Aqueous Film-Forming Foam,[71] a common fire-fighting method at military bases and airports; or 2) industrial operations which create, consume, or dispose of PFAS containing compounds. Within the SHC Research Program, EPA is developing and testing methods for site remediation including treating or removing PFAS from groundwater and soil. The research includes examination of *in situ* chemical transformation that may take place to better understand which PFAS chemical precursors might result in the highest risk outcomes. This work is being done in collaboration with the Department of Defense through participation in their Strategic Environmental Research and Development Program.[72] EPA research under the SHC also is focusing on end-of-life management of PFAS-containing materials (e.g., industrial waste, household waste) to ensure that PFAS from these materials do not impact the environment. This work provides a technical support and assistance function for state, tribes, and local communities on issues pertaining to ecological and human health risk assessment and site engineering challenges related to PFAS. Additional resources requested in FY 2021 will support implementation of the PFAS Action Plan and the FY 2020 – 2021 PFAS APG.

- **Lead Research:** *The Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts* was produced by the President's Task Force on Environmental Health Risks and Safety Risks to Children, comprised of 17 federal agencies and co-led by EPA. It is a blueprint to reduce lead exposure and associated harms to children.[73] EPA's Research and Development Program has co-led Action Plan efforts to develop science and technology to support efforts to reduce lead exposures and related health risks. SHC is working to identify locations of high exposures and blood lead levels to target lead sources for mitigation; develop innovative methods for cleaning up 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 will work to 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 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 EPA regulatory and non-regulatory efforts, as well as filling in the data gaps for federal partners, states, tribes, and local communities. This work supports the FY 2020 – 2021 Lead APG.

[71] For more information, please see: https://pfas-1.itrcweb.org/wp-content/uploads/2018/10/pfas_fact_sheet_afff__10_3_18.pdf.
[72] About SERDP: https://www.serdp-estcp.org/About-SERDP-and-ESTCP/About-SERDP.
[73] For more information, please see: https://www.epa.gov/lead/federal-action-plan-reduce-childhood-lead-exposure.

Research Planning:

EPA's Board of Scientific Counselors (BOSC) is a federal advisory committee that provides advice and recommendations to EPA on technical and management issues of its research programs. The SHC Research Program will continue to meet regularly over the next several years with the BOSC SHC subcommittee to seek input on topics related to research program design, science quality, innovation, relevance, and impact.

The Agency assesses its research performance through the distribution of research evaluation surveys to key users of its research products. This provides evidence for how research products are being used, by whom, and the degree of satisfaction product users have with research product quality, usability, and timeliness of delivery. Through the evaluation process, the Agency identifies its strengths and finds targeted areas for improvement to its research programs.

EPA's state engagement[74] 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. Key partners at the state level include: the Environmental Council of the States, with its Environmental Research Institute of the States and Interstate Technology and Regulatory Council; the Association of State and Territorial Health Officials; as well as state media associations, such as the Association of State and Territorial Solid Waste Management Officials.

Performance Measure Targets:

(PM RD1) Percentage of Office of Research and Development (ORD) research products meeting customer needs.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					No Target Estab-lished	77	80	82	Percent
Actual					77	79			
Numerator					171	154			Products
Denominator					222	196			

Work under this program supports performance results in the RCRA: Waste Minimization & Recycling Program under the EPM appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$2,242.0) This change is an increase due to the recalculation of base payroll costs.
- (+$1,500.0) This increase supports research and technical assistance regarding lead issues and contributes to the Lead Exposure Reduction Initiative focus area. This work will be guided by the *Federal Action Plan to Reduce Childhood Lead Exposures and Associated*

[74] For more information on EPA's work with States, please see: https://www.epa.gov/research/epa-research-solutions-states.

Health Impacts, as well as related activities in the 2019-2022 StRAPs and in the FY 2020-2021 Lead Agency Priority Goal.

- (+$850.0) This increase includes $350 thousand for research that increases the effectiveness of food waste campaigns and $500 thousand to study food waste collection and pretreatment technologies from a lifecycle perspective. This investment supports the multi-office focus area of Improving the U.S. Recycling System and Reducing Food Loss and Waste.

- (+$238.0 / +0.5 FTE) This increase for the PFAS focus area includes resources and FTE to support science and research to advance implementation of the PFAS Action Plan and associated milestones in support of the new FY 2020-2021 PFAS APG.

- (-$34,142.0 / -60.0 FTE) This net program change streamlines research by eliminating work related to the following activities:

    - The Ecotox database, a source for locating single chemical toxicity data for aquatic life, terrestrial plants, and wildlife;
    - The EPA's Report on the Environment (ROE), which reports on the status and trends of 85 environmental indicators like cancer rates and air pollution levels;
    - The inclusion of a data layer on ecosystem services and their beneficiaries, as well as research efforts to apply a systems approach (multi-media) to integrating the environmental impacts of transportation, waste management, and energy and water infrastructure development at the city-scale of governance;
    - Significantly reduces efforts to provide web-based tools, such as EnviroAtlas, to assess how ecosystem goods and services affect the health and well-being of residents, particularly those that are vulnerable.

- (-$18,447.0 / -51.6 FTE) This program change streamlines research efforts across environmental media by eliminating work related to: Research on the life cycle of materials in commerce; and the People, Prosperity & the Planet (P3) program for college-level competition.

- (-$18,821.0 / -24.6 FTE) This net program change streamlines research on the following areas:

    - The Health Impact Assessment (HIA) approach for assessing the impact of major planned infrastructure development (e.g., use of green infrastructure; highway construction) at a city scale of governance;
    - Human health research into the mechanisms of chemical exposures and effects on human health outcomes and well-being, especially research into cumulative effects;
    - Research into the uptake and distribution of contaminants (e.g., lead, arsenic) within vulnerable populations, especially children;
    - Research into the environmental component of children's asthma.

- (-$7,300.0) This program change proposes to eliminate funding for the Science to Achieve Results (STAR) Program for FY 2021.

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).

Research: Chemical Safety and Sustainability

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$131.9	$0.0	$0.0	$0.0
Science & Technology	***$87,304.2***	***$88,917.0***	***$66,952.0***	***-$21,965.0***
Total Budget Authority	$87,436.1	$88,917.0	$66,952.0	-$21,965.0
Total Workyears	259.7	271.9	241.4	-30.5

Total Workyears in FY 2021 include 0.8 FTE funded by TSCA fees.

Program Project Description:

The Chemical Safety for Sustainability (CSS) Research Program provides information, tools, and methods to make better-informed, more-timely decisions about the chemicals and their potential risks to human health and the environment.[75] EPA's Research and Development Program is committed to producing research results that address real-world problems, inform implementation of environmental regulations, and help EPA partners and stakeholders make timely decisions based on the best available science. CSS products strengthen the Agency's ability 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.

The CSS Research Program is one of six integrated and transdisciplinary research programs in the Research and Development Program. Each of the six integrated and transdisciplinary research 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 implemented with their active collaboration and involvement. As part of the FY 2021 Budget, the new CSS FY 2019-2022 StRAP builds upon prior CSS StRAPs and continues a practice of conducting innovative scientific research aimed at solving the problems encountered by Agency partners and stakeholders.

The CSS Research Program works with EPA programs to deliver innovative research that directly addresses Agency challenges. 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), chemical prioritization (TSCA, Safe Drinking Water Act [SDWA]), evaluation of pesticide registrations (FIFRA), and mitigation activity at Superfund sites (Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA]). The CSS Research Program works in conjunction with the Human and Environmental Risk Assessment (HERA) Research Program to improve chemical risk assessments

[75] For more information, please see: https://www.epa.gov/tsca-inventory/about-tsca-chemical-substance-inventory.

conducted by the Agency, reduce uncertainties associated with those assessments and increase the speed of delivering chemical information to Agency partners. The CSS and HERA Research Programs will continue to increase collaborative activities to provide the chemical information and scientifically robust chemical assessments needed by the Agency.

Recent Accomplishments of the CSS Research Program include:

- **Engineering a human thyroid organotypic culture model (OCM):** FQPA directs the Agency to screen and test chemicals for potential endocrine disrupting effects. In FY 2019, EPA scientists developed an *in vitro* OCM[76] of the human thyroid that can be used for assessing the disruptive effects of chemicals on thyroid hormone synthesis. Integration of the model into a thyroid-related, high-throughput screening assay battery will enable testing of chemicals prioritized for targeted key events. This provides critical context to concentration-response relationships relevant to chemical disruption of normal thyroid activity. The thyroid is an essential endocrine organ that regulates a number of diverse physiological processes required for normal growth, development, and metabolism. Detecting reduction of thyroid hormone levels is a key consideration in hazard identification for developmental neurotoxicity and in the evaluation of potential endocrine disrupting effects of chemicals.

- **Release of Multiple Digital Information Products to Inform Decision Making:** In 2019, CSS scientists delivered numerous products that inform decision making, including: major upgrades to the *Computational Toxicology Chemicals Dashboard*[77] (version 3.0.9) which houses curated information on 875,000 chemicals; major upgrades and improvements to the *ECOTOX Knowledgebase*[78] (version 5.0); release of the *Chemical Transformation Simulator* which now includes predictions of per- and polyfluoroalkyl substances (PFAS) reactions in the environment; and *SeqAPASS*[79] (version 4.0) to help predict the effects of chemicals across different species.

- **Enabling Cutting Edge Science Through Use of Science to Achieve Results (STAR) Grants:** CSS uses EPA's STAR Grant Program[80] to engage with the academic community through competitive assistance agreements involving grants and cooperative agreements. These grants support research that contributes to significant advances in the field of chemical safety, providing cutting-edge science that enables new avenues of investigation within CSS. In 2019, EPA awarded 5 grants under the Request for Applications (RFA) titled *Advancing Actionable Alternatives to Vertebrate Animal Testing for Chemical Safety Assessment*. The objective of these awards is to develop and apply alternative test methods and strategies to replace, reduce, and refine vertebrate animal testing. In 2019, EPA also announced an RFA titled *Advancing Toxicokinetics for Efficient and Robust Chemical Evaluations.* The objective of this initiative is to advance the development of chemical toxicokinetic tools and approaches for broader applicability during chemical evaluations,

[76] For more information, please see: https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NCCT&dirEntryId=344470.
[77] For more information, please see: https://comptox.epa.gov/dashboard.
[78] For more information, please see: https://cfpub.epa.gov/ecotox/.
[79] For more information, please see: https://www.epa.gov/chemical-research/sequence-alignment-predict-across-species-susceptibility.
[80] For more information, please see: https://www.epa.gov/research-grants/safer-chemicals-research-grants.

with an emphasis on their application within new approach methodologies (NAMs) framework.

- **Alternative Toxicity Testing Strategy (TSCA Section 4):** The Research and Development Program's scientists collaborate closely with EPA's Chemical Safety and Pollution Prevention Program to implement the June 2018 TSCA Strategic Plan to promote the development and implementation of alternative test methods. NAMs are focused on providing better understanding of toxicity with faster, less expensive approaches that reduce the use of mammals and other vertebrate animals for toxicity testing. EPA maintains a published list of NAMs and updated this list in December 2019.[81] CSS NAMs research also supports the EPA Administrator's recent goal of reducing the Agency's requests for, and funding of, mammal studies by 30 percent by 2025.[82]

In addition to these specific accomplishments, the CSS Research Program provides ongoing support to the Agency's Chemical Safety and Pollution Prevention Program for the successful implementation of TSCA activities related to alternative toxicity testing (Section 4), the evaluation of new chemicals (Section 5), and the evaluation of existing chemicals in the TSCA active inventory list (Section 6). The CSS Research Program also provides ongoing support for the evaluation of pesticides under FIFRA and the development of the Endocrine Disruption Screening Program under FQPA.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in the *FY 2018 – 2022 EPA Strategic Plan*. Traditional approaches for evaluating potential chemical safety have had difficulty in keeping pace with innovations in chemical design, synthesis, and use. Currently available data do not always provide a complete understanding of the potential risks that many chemicals present to human health and the environment. This can result in EPA programs, states, tribes, and others making risk-based decisions with incomplete data for chemical hazard and exposure. Of particular relevance are "chemicals of emerging concern", such as PFAS, which heighten the need for rapid, scientifically-sound approaches to evaluate potential chemical safety.

Therefore, the CSS Research Program is focused on developing approaches, tools, models, and data systems to deliver information about chemicals to address these challenges. CSS research products use innovative *in vitro* and *in silico* approaches to provide more comprehensive information about chemical hazard and exposure using methods that reduce the need for animal testing and can be faster and more cost effective compared to existing *in vivo* approaches.

The CSS Research Program is organized into eight, integrated research areas. Selected research areas are highlighted below for work in FY 2021:

[81] For more information, please see: https://www.epa.gov/chemicals-under-tsca/updates-epa-list-alternative-test-methods-animal-testing.
[82] For more information, please see: https://www.epa.gov/newsreleases/administrator-wheeler-signs-memo-reduce-animal-testing-awards-425-million-advance.

- **High-Throughput Toxicity (HTT) Testing:** In FY 2021, the CSS Research Program will continue to produce innovative tools that accelerate the pace of data-driven chemical evaluations, enabling EPA and state decisions to be environmentally sound and protective of public health and ecological resources. CSS research in the HTT research area is focused on developing, testing, and applying NAMs. NAMs address the limitations of current chemical testing methods and fulfill EPA's need to more efficiently evaluate large numbers of chemicals for potential adverse human and ecological effects. Scientific and technological advances have paved the way for using additional NAMs in the HTT research area. These will enable EPA to make better, more timely decisions about chemicals by increasing toxicological information for more chemicals. These new approaches also reduce the need to use mammals in chemical testing, which is an Agency priority. This research directly supports the Agency's efforts to fulfill requirements for: chemical evaluation under TSCA as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act; pesticide evaluation under FIFRA; chemical testing for endocrine system impacts under FQPA; and chemical evaluation as part of SDWA.

- **Rapid Exposure Modeling and Dosimetry:** In FY 2021, EPA research under the CSS Research Program will continue to provide data, models, and tools to characterize total human exposure to environmental chemicals. This will inform Agency chemical prioritizations and evaluations; Agency implementation of TSCA Section 5 (New Chemicals) and Section 6 (Existing Chemicals); Agency chemical prioritization efforts; and identify contaminants of emerging concern. Research in the Rapid Exposure Modeling and Dosimetry research area 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 environmental media, biological media, and consumer products.

- **PFAS Research:**[83] PFAS are a class of chemicals of growing concern in the environment, and EPA has committed to action supporting states, tribes, and local communities in understanding and managing risks associated with these chemicals.[84] The CSS Research Program has responded to this Agency priority with research designed to: improve understanding of the toxicity of PFAS chemicals; evaluate PFAS fate, transport, occurrence, and persistence in the environment and in consumer products; and deliver chemical information to partners and stakeholders in the government and private sector. A significant challenge is understanding potential PFAS chemical toxicity because this class of chemicals includes thousands of different chemical compounds, most of which have little or no published toxicity data available.[85] CSS is addressing this gap by conducting high throughput computational toxicological screening assays on an initial set of 150 PFAS chemicals, which have been selected to represent a broad array of chemical and physical structural properties of the PFAS universe of compounds. The results will be used to identify subsets of PFAS chemicals having similar structural and toxicological properties

[83] For the EPA PFAS Action Plan, please see: https://www.epa.gov/sites/production/files/2019-02/documents/pfas_action_plan_021319_508compliant_1.pdf.
[84] For more information, please see: https://www.epa.gov/pfas/pfas-community-engagement.
[85] For more information, please see: https://www.epa.gov/pfas/epa-pfas-research.

thus increasing the strength of predictive toxicological models. Additionally, the results of these studies will be used to help the Agency prioritize more detailed studies. This work is being done in collaboration with the National Institute of Environmental Health Sciences: National Toxicology Program. Resources requested in FY 2021 will support science and research to advance implementation of the PFAS Action Plan and the EPA FY 2020 – 2021 PFAS Agency Priority Goal (APG).

- **Improved Understanding of Biological Impacts:** The CSS Research Program will employ data generated from its chemical evaluation research to develop interpretive frameworks and models to put complex information into biological, chemical, and toxicological context. This information is captured in adverse outcome pathways (AOPs) which link molecular initiating events to apical outcomes. These pathways help decision-makers understand the significance of chemical impacts on biological systems. Included in the development of these AOPs are data developed in the HTT and Virtual Tissue Modeling research areas to capture information on chemical impacts to molecular pathways, cells, and complex tissues. This is especially important to understanding chemical impacts on developmental and reproductive biology. CSS also is applying AOP frameworks to model ecological outcomes across broad taxonomic and ecological scales.

- **Delivery of Chemical Information:** The CSS Research Program will deliver chemical data and related information to its partners in a scientifically robust, transparent manner. The Chemical Safety Analytics research area of CSS provides computational, predictive tools to estimate physicochemical, toxicological, and exposure information for data poor chemicals. The Informatics, Synthesis, and Integration research area brings together chemical information developed by the CSS Research Program with information from other sources to inform Agency decision makers. Building on this foundation, EPA is working with its partners to build program-specific applications, such as RapidTox. These applications will give risk assessors and decision-makers confidence that the new approaches, data, and tools developed in CSS are both scientifically sound and relevant to environmental decision making. CSS continues to invest in the CompTox Chemicals Dashboard[86] as a "first-stop-tool" for the delivery of chemical information.

Research Planning:

EPA's Board of Scientific Counselors (BOSC) is a federal advisory committee that provides advice and recommendations to EPA on technical and management issues of its research programs. The CSS Research Program and BOSC CSS subcommittee will continue to meet regularly over the next several years to seek input on topics related to research program design, science quality, innovation, relevance, and impact.

The Agency assesses its research performance through the distribution of research evaluation surveys to key users of its research products. This provides evidence for how research products are being used, by whom, and the degree of satisfaction product users have with research product quality, usability, and timeliness of delivery. Through the evaluation process, the Agency identifies its strengths and finds targeted areas for improvement to its research programs.

[86] For more information, please see: https://www.epa.gov/chemical-research/comptox-chemicals-dashboard.

EPA's state engagement program[87] 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. Key partners at the state level include: the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council; the Association of State and Territorial Health Officials; as well as state media associations, such as the Association of State and Territorial Solid Waste Management Officials.

Performance Measure Targets:

(PM RD1) Percentage of Office of Research and Development (ORD) research products meeting customer needs.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					No Target Estab-lished	77	80	82	Percent
Actual					77	79			
Numerator					171	154			Products
Denominator					222	196			

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$3,130.0) This change is an increase due to the recalculation of base payroll costs.
- (+$289.0 / +0.5 FTE) This increase for the PFAS focus area includes resources and FTE to support science and research to advance implementation of the PFAS Action Plan and associated milestones in support of the FY 2020 – 2021 PFAS APG.
- (-$4,200.0) This program change prioritizes intramural activities over extramural activities by eliminating funding for the Science to Achieve Results (STAR) program for FY 2021.
- (-$12,962.0 / -1.8 FTE) This net program change streamlines resources available for the development of high-throughput toxicity testing, the Agency's development of improved methods for chemical evaluations, and research efforts focused on endocrine disrupting chemicals in order to focus on the most pressing chemical evaluations.
- (-$8,222.0 / -30.0 FTE) This net program change streamlines funding for the development of virtual tissue models and tools to conduct chemical toxicity screening.
- (+0.8 FTE) This FTE increase is a change due to the need to support risk assessment and evaluation science to support new TSCA requirements.

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

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).

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Science & Technology	***$37,003.7***	***$37,351.0***	***$24,694.0***	***-$12,657.0***
Hazardous Substance Superfund	$2,864.9	$12,824.0	$6,159.0	-$6,665.0
Total Budget Authority	$39,868.6	$50,175.0	$30,853.0	-$19,322.0
Total Workyears	144.0	154.9	111.6	-43.3

Program Project Description:

EPA's Health and Environmental Risk Assessment (HERA) Research 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: Clean Air Act, Clean Water Act; Safe Drinking Water Act; Toxic Substances Control Act (TSCA); and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

The HERA Research Program is one of six integrated and transdisciplinary research programs in the Research and Development Program. Each of the six integrated and transdisciplinary research 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 implemented with their active collaboration and involvement. As part of the FY 2021 Budget, the new HERA FY 2019-2022 StRAP builds upon prior Human Health Risk Assessment (HHRA) StRAPs and continues a practice of conducting innovative scientific research aimed at solving the problems encountered by Agency partners and stakeholders.

For the FY 2021 Budget, EPA renamed the HHRA Research Program to the HERA Research Program to more accurately reflect the breadth of assessments conducted under this research program, including exposure and ecological assessments as well as human health hazard assessments. For example, this research program prepares the Integrated Science Assessments (ISAs) for both the primary and secondary National Ambient Air Quality Standards (NAAQS), the former statutorily related to human health effects and the latter covering human welfare, which includes ecological and other environmental impacts of the air pollutants. The timing of the name change to HERA also coincides with, and is supportive of, the Research and Development Program's reorganization which occurred in September 2019.

The current portfolio of HERA products encompasses these two topic areas:

- **Science Assessments and Translation:** The Science Assessments and Translation topic showcases EPA's focus on the science and practice of assessment development. A portfolio of assessment products will be produced that are responsive to Agency priorities and timelines. The portfolio will include assessments from among the traditional product lines – Integrated Risk Information System (IRIS), ISAs, and Provisional Peer-Reviewed Toxicity Values (PPRTVs) – in addition to a wide range of innovative fit-for-purpose modules, such as those developed for TSCA. Additionally, significant emphasis will be placed on providing scientific and technical support throughout the lifecycle of decisions, from development to application of the assessment products.

- **Advancing the Science of Risk Assessment:** The HERA Research Program is multidisciplinary and aimed at incorporating scientific innovations to advance analytic approaches and applications. Research under this topic is targeted at enhancing hazard characterization, expanding the repertoire of dose-response methods and models, and characterizing the utility of emerging data and new computational tools as applied to risk assessment. It also enhances and maintains critical assessment infrastructure, including database models and software support, to ensure transparency and to facilitate understanding and translation to Agency partners and external stakeholders. Refinements to current approaches will be anchored in assessment development and are expected to improve the accuracy, efficiency, flexibility, and utility of applications across a large landscape of assessment activities.

Recent Accomplishments of the HERA Research Program include:

The HERA Research Program has been developing new assessment product lines to enhance timely response, improve screening capabilities, and augment toxicity value derivations for risk assessments.

- **IRIS:** In FY 2019, IRIS assessment materials for hexavalent chromium[88] and methyl mercury[89] were released publicly. The National Academy of Science (NAS) peer reviewed the systematic review protocol for inorganic arsenic. Science Advisory Board (SAB) peer reviews for Ethyl tert-Butyl Ether and tert-Butyl Alcohol IRIS assessments were completed and the assessments are expected to be finalized in quarter three of FY 2020. Several NAS workshops were held to continue to advance the science and practice of assessment development. The draft assessment of Perfluorobutane Sulfonic Acid and related compound Potassium Perfluorobutane Sulfonate was released for public comment, revised in response, and is now expected to be published as final in quarter three of FY 2020. Additionally, work in FY 2019 facilitated the release of the IRIS assessment materials for polychlorinated biphenyls, mercury salts, and Per- and Polyfluoroalkyl Substances (PFAS) in early FY 2020.

[88] For more information, please see: https://cfpub.epa.gov/ncea/iris_drafts/recordisplay.cfm?deid=343950.
[89] For more information, please see: https://cfpub.epa.gov/ncea/iris_drafts/recordisplay.cfm?deid=343693.

- **TSCA Risk Evaluation Support:** HERA continues to provide targeted support to TSCA on the first 10 TSCA risk evaluations under the Lautenberg Chemical Safety Act. HERA also provides information management support utilizing the HERA *Health and Environmental Research Online*[90] database. Additionally, new workflows to provide support for the next 20 TSCA high priority risk evaluations are underway in FY 2020.

- **ISAs:** The draft ISAs for Particulate Matter and Ozone were provided for peer review to the Clean Air Scientific Advisory Committee. EPA updated the Particulate Matter report based on comments on the draft and released the final report in December 2019.[91] The Ozone ISA is expected to be finalized in quarter three of FY 2020. HERA also provided scientific and regulatory support to the Air and Radiation Program in rulemaking and in the development of the Ozone and Particulate Matter Risk and Exposure and Policy Assessments.[92]

- **PPRTV Assessments:** HERA continues to provide ongoing technical support for EPA's human health and ecological risk assessment programs. HERA delivered three[93] high-priority PPRTV assessments in FY 2019 to support Superfund priorities; at least five more assessments are expected in FY 2020. Chapter three of the 2011 Edition of the Exposure Factors Handbook[94] (EFH) was updated to cover ingestion of water and other select liquids, and ExpoFIRST**,** a companion tool to the EFH, was updated accordingly. The All Ages Lead Model[95] was provided in September 2019 to the SAB for peer review. The SAB convened during an October 2019 public meeting and continued advancements were made to HERA's dose-response analysis tool, Benchmark Dose Software.

- **Innovations in Risk Assessment:** Having modernized its assessment infrastructure, EPA research under HERA is using evidence mapping to provide a better understanding of the extent and nature of data available to address Agency chemical assessment priorities. It also serves to focus the assessments on support for specific decision contexts (i.e., 'fit for purpose'). This approach is expected to improve assessment throughput and prioritize more timely assessments responsive to the priority needs of Agency offices and partners.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, the HERA Research Program's work will focus on efforts integral to achieving EPA priorities and informing the Agency's implementation of key environmental regulations. Specifically, in FY 2021 HERA will:

[90] For more information, please see: https://hero.epa.gov/hero/index.cfm/content/home.
[91] For more information, please see: https://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=347534.
[92] To view assessment documents, please see: https://www.epa.gov/naaqs/carbon-monoxide-co-standards-risk-and-exposure-assessments-current-review.
[93] Please see the HERA Superfund narrative for more information and for links to these three assessments.
[94] For more information, please see: https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236252.
[95] For more information, please see: https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=343670.

- Continue developing additional assessments through IRIS of perfluorinated compounds as described in EPA's PFAS Action Plan,[96] as well as other priority chemicals of interest to EPA's Water Program and Land and Emergency Management Program. In addition, HERA will continue to provide assessments on priority chemicals that include polychlorinated biphenyls, methylmercury, mercury salts, vanadium compounds, hexavalent chromium, inorganic arsenic, perfluorononanoate, perfluorobutyrate, perfluorohexanoic acid, perfluorohexane sulfonic acid, and perfluorodecanoate. HERA will continue to provide scientific and technical support to the Air and Radiation Program on decisions to retain or revise the NAAQS, and to the Chemical Safety and Pollution Prevention Program on TSCA implementation.

- 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, and focus the assessments on support for specific decision contexts (i.e., 'fit for purpose') through a modernized assessment infrastructure.

- Provide the resources and workflow to two of the five Research and Development Program's technical support centers (TSCs)[97] to provide localized and tailored technical assistance and scientific expertise on human and ecological risk assessments to states, tribes, and EPA. 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, in cooperation with the Chemical Safety for Sustainability Research Program.

In addition to the activities listed above, EPA also conducts 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 in understanding and managing risks associated with these chemicals. Decision-making at the state and local level is hindered by a limited number of standard toxicity values (such as reference doses and cancer risk estimates) for many PFAS chemicals of interest. Toxicity values currently exist for PFOA and PFOS.[98] The Agency will soon finalize toxicity assessments for GenX[99] chemicals and PFBS,[100] but there are other PFAS of high interest to stakeholders which currently have no federal published, peer-reviewed toxicity values. Within the HERA Research Program, EPA is prioritizing additional PFAS for development

[96] For more information, please see: https://www.epa.gov/pfas/epas-pfas-action-plan.
[97] 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.
[98] Perfluorooctanoic Acid (PFOA), Perfluorooctanesulphonic Acid (PFOS).
[99] GenX chemical assessments are owned by EPA's Water Program; the timeline for these assessments is different than PFBS. For more information on the timeline of these assessments, please contact EPA's Water Program.
[100] ORD is moving through with the assessment process for Perfluorobutane sulfonate (PFBS) as planned and anticipate finalizing in quarter three of FY 2020.

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. This work supports the FY 2020 – 2021 PFAS Agency Priority Goal (APG).

- **Lead:** Childhood lead exposure continues to be one of the highest priorities for EPA. To advance lead exposure and biokinetic models used in EPA regulatory decisions and site assessments, research focuses on enhancing, evaluating, and applying lead exposure and biokinetic models used for estimating potential blood lead levels and related analyses for regulatory determinations. Additionally, the Exposure Factors Handbook[101] provides up-to-date data on various human factors, including soil and dust ingestion rates, used by risk assessors. This work supports the FY 2020 – 2021 Lead APG.

Research Planning:

EPA's Board of Scientific Counselors (BOSC) is a federal advisory committee that provides advice and recommendations to EPA on technical and management issues of its research programs. The HERA Research Program and the BOSC HERA subcommittee will continue to meet regularly over the next several years to seek input on topics related to research program design, science quality, innovation, relevance, and impact.

The Agency assesses its research performance through the distribution of research evaluation surveys to key users of its research products. This provides evidence for how research products are being used, by whom, and the degree of satisfaction product users have with research product quality, usability, and timeliness of delivery. Through the evaluation process, the Agency identifies its strengths and finds targeted areas for improvement to its research programs.

EPA's state engagement[102] 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. Key partners at the state level include: the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council; the Association of State and Territorial Health Officials; as well as state media associations, such as the Association of State and Territorial Solid Waste Management Officials.

Performance Measure Targets:

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

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$1,141.0) This change is an increase due to the recalculation of base payroll costs.

[101] For more information, please see: https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236252.
[102] For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

- (+$1,000.0) This increase supports research and technical assistance regarding lead issues and contributes to the Lead Exposure Reduction Initiative focus area. This work will be guided by the *Federal Lead Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts* as well as related activities in the 2019-2022 StRAPs and the FY 2020-2021 Lead APG.

- (-$12,284.0 / -43.3 FTE) This program change streamlines the HERA Research Program to focus on the highest priority assessments.

- (-$2,514.0 / -14.7 FTE) This rebalances resources from the S&T appropriation within this program to the Superfund appropriation for work related to IRIS assessments.

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).

Water: Human Health Protection

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$92,373.1	$100,903.0	$97,462.0	-$3,441.0
Science & Technology	***$3,227.6***	***$4,094.0***	***$4,364.0***	***$270.0***
Total Budget Authority	$95,600.7	$104,997.0	$101,826.0	-$3,171.0
Total Workyears	461.6	475.2	459.9	-15.3

Program Project Description:

The Drinking Water Technical Support Center leads the collection of national occurrence data for unregulated contaminants in drinking water; develops and evaluates analytical methods that are used to monitor drinking water contaminants accurately and reliably; leads the national program under which laboratories are certified to conduct the analyses of water contaminants with designated analytical methods; and works with states and public water systems collaboratively to implement tools that help systems achieve performance and optimization practices that achieve compliance and maximize technical capacity while reducing operational costs.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, EPA's Drinking Water Technical Support Center will continue to carry out the following activities:

- Lead the development, revision, evaluation, and approval of chemical and microbiological analytical methods for unregulated and regulated contaminants to assess and ensure protection of public health from contaminants in drinking water (e.g., toxins resulting from harmful algal blooms, and polyfluoroalkyl substances [PFAS].) This work supports the PFAS FY 2020 – 2021 Agency Priority Goal.
- Implement EPA's Drinking Water Laboratory Certification Program,[103] which sets direction for oversight of state, municipal, and commercial laboratories that analyze drinking water samples. Conduct three regional program reviews during FY 2021 and deliver two laboratory certification officer training courses (chemistry and microbiology) for state and regional representatives to ensure the quality of analytical results.
- Partner with states and water systems to optimize their treatment technology and distribution systems under the drinking water Area Wide Optimization Program

[103] For more information, please see: https://www.epa.gov/dwlabcert.

(AWOP).[104] AWOP is a highly successful technical/compliance assistance and training program that enhances the ability of small systems to comply with existing microbial, disinfectant, and disinfection byproduct standards, and addresses distribution system integrity and water quality issues. During FY 2021, EPA expects to work with states and tribes to train them how to identify performance limiting factors at public water systems and develop and apply tailored tools to help them overcome operational challenges, achieve performance and optimization levels, and address health-based compliance challenges.

- Complete monitoring under the fourth Unregulated Contaminant Monitoring Rule[3] (UCMR 4). The UCMR 4 was published in December 2016 and addresses the collection of data on occurrence of 30 contaminants of interest (e.g., cyanotoxins, disinfection by-products, pesticides) to assess the frequency and levels at which these contaminants are found in public water systems. The UCMR 4 is a federal direct implementation program coordinated by EPA, as directed by the Safe Drinking Water Act (SDWA). The data collected are used by EPA as part of the Agency's determination of whether to establish health-based standards to protect public health. Monitoring and reporting activities for UCMR 4 started in FY 2018 and will conclude in FY 2021. 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 data available to our state and tribal partners and to the general public. During FY 2021, EPA also expects to publish the proposed rule for the fifth cycle of UCMR monitoring (UCMR5) for public comment.
- Conduct pre-monitoring implementation activities to prepare for the UCMR 5 sampling period from 2023 through 2025. EPA expects UCMR 5 to be the first cycle of UCMR that will implement the monitoring provisions of the America's Water Infrastructure Act of 2018 (AWIA) which require, subject to the availability of appropriations and adequate laboratory capacity, sampling at all public water systems (PWSs) serving between 3,300 and 10,000 persons, and a representative sample of PWSs serving fewer than 3,300 persons.

Performance Measure Targets:

Work under this program supports performance results in the Drinking Water State Revolving Fund and Categorical Grant: Public Water System Supervision Programs under the STAG appropriation and the Drinking Water Programs under the EPM appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$168.0) This change is an increase due to the recalculation of base payroll costs.

- (+$102.0 / +4.2 FTE) This program change increases resources and FTE for the implementation and administration of the requirements of AWIA.

[104] For more information, please see: https://www.epa.gov/dwstandardsregulations/optimization-program-drinking-water-systems.
[3]For more information, please see: https://www.epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule.

Statutory Authority:

SDWA.

Congressional Priorities

Water Quality Research and Support Grants
Program Area: Congressional Priorities
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$0.0	$17,700.0	$0.0	-$17,700.0
Science & Technology	***$4,092.0***	***$6,000.0***	***$0.0***	***-$6,000.0***
Total Budget Authority	$4,092.0	$23,700.0	$0.0	-$23,700.0

Program Project Description:

In FY 2020, Congress appropriated $6.0 million in the Science and Technology appropriation to fund high priority water quality and water availability research. EPA was instructed 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 25 percent match, including in-kind contributions; and often partner with the Agency.

FY 2021 Activities and Performance Plan:

Resources have been proposed for elimination for this program in FY 2021.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$6,000.0) This decrease proposes to eliminate funding for the Water Quality Research and Support Grants Program.

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.

Environmental Protection Agency
FY 2021 Annual Performance Plan and Congressional Justification

Table of Contents – Environmental Programs and Management

Program Projects in EPM 170
Clean Air 174
Clean Air Allowance Trading Programs 175
Atmospheric Protection Program 179
Federal Stationary Source Regulations 182
Federal Support for Air Quality Management 186
Stratospheric Ozone: Domestic Programs 192
Stratospheric Ozone: Multilateral Fund 196
Brownfields 197
Brownfields 198
Compliance 201
Compliance Monitoring 202
Enforcement 207
Civil Enforcement 208
Criminal Enforcement 212
Environmental Justice 214
NEPA Implementation 216
Geographic Programs 218
Geographic Program: Chesapeake Bay 219
Geographic Program: Gulf of Mexico 221
Geographic Program: Lake Champlain 222
Geographic Program: Long Island Sound 223
Geographic Program: Other 224
Geographic Program: South Florida 226
Geographic Program: San Francisco Bay 230
Geographic Program: Puget Sound 231
Great Lakes Restoration 232
Homeland Security 239
Homeland Security: Communication and Information 240

Homeland Security: Critical Infrastructure Protection 244
Homeland Security: Protection of EPA Personnel and Infrastructure 246
Indoor Air and Radiation 248
Indoor Air: Radon Program 249
Radiation: Protection 250
Radiation: Response Preparedness 252
Reduce Risks from Indoor Air 254
Information Exchange 255
Children and Other Sensitive Populations: Agency Coordination 256
Environmental Education 259
Exchange Network 260
Executive Management and Operations 263
Small Business Ombudsman 267
Small Minority Business Assistance 270
State and Local Prevention and Preparedness 273
TRI / Right to Know 276
Tribal - Capacity Building 279
International Programs 282
International Sources of Pollution 283
Trade and Governance 287
US Mexico Border 289
IT/ Data Management/ Security 291
Information Security 292
IT / Data Management 295
Legal/ Science/ Regulatory/ Economic Review 299
Administrative Law 300
Alternative Dispute Resolution 302
Civil Rights Program 303
Integrated Environmental Strategies 308
Legal Advice: Environmental Program 313
Legal Advice: Support Program 316
Regional Science and Technology 318
Regulatory/Economic-Management and Analysis 319
Science Advisory Board 323

Operations and Administration **325**
Acquisition Management 326
Central Planning, Budgeting, and Finance 330
Facilities Infrastructure and Operations 334
Financial Assistance Grants / IAG Management 337
Human Resources Management 340
Pesticides Licensing **344**
Science Policy and Biotechnology 345
Pesticides: Protect Human Health from Pesticide Risk 346
Pesticides: Protect the Environment from Pesticide Risk 352
Pesticides: Realize the Value of Pesticide Availability 359
Resource Conservation and Recovery Act (RCRA) **363**
RCRA: Corrective Action 364
RCRA: Waste Management 367
RCRA: Waste Minimization & Recycling 371
Toxics Risk Review and Prevention **374**
Endocrine Disruptors 375
Pollution Prevention Program 376
Toxic Substances: Chemical Risk Review and Reduction 377
Toxic Substances: Lead Risk Reduction Program 385
Underground Storage Tanks (LUST/UST) **387**
LUST / UST 388
Water Ecosystems **391**
National Estuary Program / Coastal Waterways 392
Wetlands 393
Water: Human Health Protection **396**
Beach / Fish Programs 397
Drinking Water Programs 398
Water Quality Protection **404**
Marine Pollution 405
Surface Water Protection 407
Congressional Priorities **413**
Water Quality Research and Support Grants 414

APPROPRIATION: Environmental Programs & Management
Resource Summary Table

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management				
Budget Authority	$2,596,472.2	$2,663,356.0	$2,236,224.0	-$427,132.0
Total Workyears	8,562.2	8,808.6	7,643.7	-1,164.9

Bill Language: Environmental Program and Management

For environmental programs and management, including necessary expenses, not otherwise provided for, for personnel and related costs and travel expenses; hire of 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; and not to exceed $19,000 for official reception and representation expenses, $2,236,224,000, to remain available until September 30, 2022. Provided further, That of the funds included in the first paragraph 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.

In addition, $46,000,000, to remain available until September 30, 2022, for necessary expenses of the Energy Star program established by section 324A of The Energy Policy and Conservation Act (42 U.S.C. 6294a): Provided, That the Administrator of the Environmental Protection Agency shall collect fees pursuant to section 324A(e) (42 U.S.C. 6294a(e)), as added by this Act, and such fees shall be credited to this appropriation as offsetting collections: Provided further, That the sum herein ap- propriated in this paragraph from the general fund shall be reduced as such collections are received during fiscal year 2021 so as to result in a final fiscal year appropriation from the general fund estimated at $0: Provided further, That to the extent such collections received in fiscal year 2021 exceed $46,000,000, those excess amounts shall be deposited in the general fund.

Program Projects in EPM
(Dollars in Thousands)

Program Project	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Clean Air				
Clean Air Allowance Trading Programs	$15,302.4	$13,619.0	$13,231.0	-$388.0
Atmospheric Protection Program	$90,985.1	$95,436.0	$14,512.0	-$80,924.0
Federal Stationary Source Regulations	$19,279.9	$20,093.0	$17,877.0	-$2,216.0
Federal Support for Air Quality Management	$132,513.9	$130,588.0	$114,095.0	-$16,493.0
Stratospheric Ozone: Domestic Programs	$5,060.4	$4,661.0	$4,087.0	-$574.0
Stratospheric Ozone: Multilateral Fund	$8,326.0	$8,711.0	$0.0	-$8,711.0
Subtotal, Clean Air	$271,467.7	$273,108.0	$163,802.0	-$109,306.0
Indoor Air and Radiation				
Indoor Air: Radon Program	$2,642.6	$3,136.0	$0.0	-$3,136.0
Radiation: Protection	$10,880.5	$7,992.0	$2,470.0	-$5,522.0
Radiation: Response Preparedness	$2,078.1	$2,196.0	$2,350.0	$154.0
Reduce Risks from Indoor Air	$10,931.6	$11,627.0	$0.0	-$11,627.0
Subtotal, Indoor Air and Radiation	$26,532.8	$24,951.0	$4,820.0	-$20,131.0
Brownfields				
Brownfields	$22,939.3	$23,647.0	$17,816.0	-$5,831.0
Compliance				
Compliance Monitoring	$100,132.8	$101,665.0	$95,649.0	-$6,016.0
Enforcement				
Civil Enforcement	$160,202.2	$167,615.0	$157,820.0	-$9,795.0
Criminal Enforcement	$46,342.0	$47,635.0	$46,627.0	-$1,008.0
Environmental Justice	$5,033.5	$9,554.0	$2,729.0	-$6,825.0
NEPA Implementation	$13,827.4	$15,833.0	$17,937.0	$2,104.0
Subtotal, Enforcement	$225,405.1	$240,637.0	$225,113.0	-$15,524.0
Geographic Programs				
Geographic Program: Chesapeake Bay	$72,800.7	$85,000.0	$7,300.0	-$77,700.0
Geographic Program: Gulf of Mexico	$17,690.4	$17,553.0	$0.0	-$17,553.0
Geographic Program: Lake Champlain	$10,995.0	$13,390.0	$0.0	-$13,390.0
Geographic Program: Long Island Sound	$14,232.7	$21,000.0	$0.0	-$21,000.0
Geographic Program: Other				
Lake Pontchartrain	$947.0	$1,089.0	$0.0	-$1,089.0
S.New England Estuary (SNEE)	$4,842.8	$5,741.0	$0.0	-$5,741.0

Program Project	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Geographic Program: Other (other activities)	$1,401.5	$2,736.0	$0.0	-$2,736.0
Subtotal, Geographic Program: Other	$7,191.3	$9,566.0	$0.0	-$9,566.0
Great Lakes Restoration	$292,571.0	$320,000.0	$320,000.0	$0.0
Geographic Program: South Florida	$1,305.2	$4,845.0	$3,206.0	-$1,639.0
Geographic Program: San Francisco Bay	$8,381.7	$5,922.0	$0.0	-$5,922.0
Geographic Program: Puget Sound	$27,936.8	$33,000.0	$0.0	-$33,000.0
Subtotal, Geographic Programs	$453,104.8	$510,276.0	$330,506.0	-$179,770.0
Homeland Security				
Homeland Security: Communication and Information	$4,003.8	$3,818.0	$3,677.0	-$141.0
Homeland Security: Critical Infrastructure Protection	$444.4	$840.0	$1,361.0	$521.0
Homeland Security: Protection of EPA Personnel and Infrastructure	$5,755.6	$5,355.0	$4,986.0	-$369.0
Subtotal, Homeland Security	$10,203.8	$10,013.0	$10,024.0	$11.0
Information Exchange / Outreach				
State and Local Prevention and Preparedness	$12,588.0	$13,594.0	$10,862.0	-$2,732.0
TRI / Right to Know	$12,136.9	$12,155.0	$8,065.0	-$4,090.0
Tribal - Capacity Building	$13,780.0	$13,072.0	$14,099.0	$1,027.0
Executive Management and Operations	$51,243.2	$47,259.0	$43,784.0	-$3,475.0
Environmental Education	$8,597.1	$8,580.0	$0.0	-$8,580.0
Exchange Network	$17,090.3	$15,184.0	$12,328.0	-$2,856.0
Small Minority Business Assistance	$1,411.3	$987.0	$1,080.0	$93.0
Small Business Ombudsman	$1,906.9	$1,824.0	$1,983.0	$159.0
Children and Other Sensitive Populations: Agency Coordination	$5,903.7	$6,173.0	$2,704.0	-$3,469.0
Subtotal, Information Exchange / Outreach	$124,657.4	$118,828.0	$94,905.0	-$23,923.0
International Programs				
US Mexico Border	$3,236.0	$2,693.0	$0.0	-$2,693.0
International Sources of Pollution	$7,011.4	$6,553.0	$10,628.0	$4,075.0
Trade and Governance	$5,716.8	$5,365.0	$0.0	-$5,365.0
Subtotal, International Programs	$15,964.2	$14,611.0	$10,628.0	-$3,983.0
IT / Data Management / Security				
Information Security	$7,649.5	$7,593.0	$14,012.0	$6,419.0
IT / Data Management	$78,748.7	$80,223.0	$79,064.0	-$1,159.0
Subtotal, IT / Data Management / Security	$86,398.2	$87,816.0	$93,076.0	$5,260.0

Program Project	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Legal / Science / Regulatory / Economic Review				
Integrated Environmental Strategies	$10,760.9	$10,152.0	$14,200.0	$4,048.0
Administrative Law	$4,527.9	$4,835.0	$5,104.0	$269.0
Alternative Dispute Resolution	$667.4	$870.0	$0.0	-$870.0
Civil Rights Program	$8,972.5	$8,814.0	$9,780.0	$966.0
Legal Advice: Environmental Program	$51,526.8	$47,978.0	$50,263.0	$2,285.0
Legal Advice: Support Program	$14,926.0	$14,478.0	$18,082.0	$3,604.0
Regional Science and Technology	$1,224.3	$808.0	$0.0	-$808.0
Science Advisory Board	$3,154.5	$3,214.0	$4,031.0	$817.0
Regulatory/Economic-Management and Analysis	$12,616.7	$13,094.0	$17,294.0	$4,200.0
Subtotal, Legal / Science / Regulatory / Economic Review	$108,377.0	$104,243.0	$118,754.0	$14,511.0
Operations and Administration				
Central Planning, Budgeting, and Finance	$72,920.6	$71,423.0	$76,603.0	$5,180.0
Facilities Infrastructure and Operations	$321,500.4	$287,595.0	$317,345.0	$29,750.0
Acquisition Management	$33,799.8	$30,945.0	$29,621.0	-$1,324.0
Human Resources Management	$43,339.9	$41,556.0	$44,538.0	$2,982.0
Financial Assistance Grants / IAG Management	$23,794.8	$23,802.0	$21,452.0	-$2,350.0
Subtotal, Operations and Administration	$495,355.5	$455,321.0	$489,559.0	$34,238.0
Pesticides Licensing				
Science Policy and Biotechnology	$1,823.4	$1,605.0	$0.0	-$1,605.0
Pesticides: Protect Human Health from Pesticide Risk	$55,368.2	$58,753.0	$51,268.0	-$7,485.0
Pesticides: Protect the Environment from Pesticide Risk	$39,444.2	$38,966.0	$32,100.0	-$6,866.0
Pesticides: Realize the Value of Pesticide Availability	$7,193.6	$7,722.0	$6,014.0	-$1,708.0
Subtotal, Pesticides Licensing	$103,829.4	$107,046.0	$89,382.0	-$17,664.0
Research: Chemical Safety for Sustainability				
Research: Chemical Safety for Sustainability	$131.9	$0.0	$0.0	$0.0
Resource Conservation and Recovery Act (RCRA)				
RCRA: Corrective Action	$34,554.0	$36,973.0	$35,126.0	-$1,847.0
RCRA: Waste Management	$58,728.3	$66,819.0	$50,399.0	-$16,420.0
RCRA: Waste Minimization & Recycling	$8,840.2	$8,997.0	$4,253.0	-$4,744.0
Subtotal, Resource Conservation and Recovery Act (RCRA)	$102,122.5	$112,789.0	$89,778.0	-$23,011.0

Program Project	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Toxics Risk Review and Prevention				
Endocrine Disruptors	$8,178.1	$7,533.0	$0.0	-$7,533.0
Pollution Prevention Program	$11,657.5	$11,127.0	$0.0	-$11,127.0
Toxic Substances: Chemical Risk Review and Reduction	$64,241.5	$60,488.0	$69,004.0	$8,516.0
Toxic Substances: Lead Risk Reduction Program	$11,663.0	$11,567.0	$0.0	-$11,567.0
Subtotal, Toxics Risk Review and Prevention	$95,740.1	$90,715.0	$69,004.0	-$21,711.0
Underground Storage Tanks (LUST / UST)				
LUST / UST	$11,089.8	$10,750.0	$6,863.0	-$3,887.0
Water: Ecosystems				
National Estuary Program / Coastal Waterways	$26,425.7	$29,823.0	$0.0	-$29,823.0
Wetlands	$17,234.9	$19,241.0	$22,604.0	$3,363.0
Subtotal, Water: Ecosystems	$43,660.6	$49,064.0	$22,604.0	-$26,460.0
Water: Human Health Protection				
Beach / Fish Programs	$1,490.8	$1,584.0	$0.0	-$1,584.0
Drinking Water Programs	$92,373.1	$100,903.0	$97,462.0	-$3,441.0
Subtotal, Water: Human Health Protection	$93,863.9	$102,487.0	$97,462.0	-$5,025.0
Water Quality Protection				
Marine Pollution	$9,349.3	$9,258.0	$4,680.0	-$4,578.0
Surface Water Protection	$196,146.1	$198,431.0	$201,799.0	$3,368.0
Subtotal, Water Quality Protection	$205,495.4	$207,689.0	$206,479.0	-$1,210.0
Congressional Priorities				
Water Quality Research and Support Grants	$0.0	$17,700.0	$0.0	-$17,700.0
TOTAL EPM	**$2,596,472.2**	**$2,663,356.0**	**$2,236,224.0**	**-$427,132.0**

Clean Air

Clean Air Allowance Trading Programs

Program Area: Clean Air
Goal: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$15,302.4***	***$13,619.0***	***$13,231.0***	***-$388.0***
Science & Technology	$7,834.8	$7,463.0	$5,739.0	-$1,724.0
Total Budget Authority	$23,137.2	$21,082.0	$18,970.0	-$2,112.0
Total Workyears	64.5	63.7	61.7	-2.0

Program Project Description:

Sulfur dioxide (SO_2) and nitrogen oxides (NO_X) are precursors for fine particulate matter ($PM_{2.5}$), while NO_X also is a precursor for ground-level ozone. Researchers have associated $PM_{2.5}$ and ozone (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 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 designed to control SO_2 and NO_X include Title IV (the Acid Rain Program) of the Clean Air Act, the Cross-State Air Pollution Rule (CSAPR), and the Texas SO_2 Trading Program.

The Clean Air Allowance Trading Programs establish a total emission limit that is allocated to affected emission sources in the form of allowances – authorizations to emit one ton of a pollutant. The owners and operators of affected emission sources may select among different methods of compliance – install pollution control equipment, switch fuel types, purchase allowances, or other strategies. These programs are managed through a centralized database system operated by EPA.[1] Select data, collected under these programs, are made available to the public through EPA's Air Markets Program Data website[2], which provides access to both current and historical data collected as part of the Clean Air Allowance Trading Programs through charts, reports, and pre-packaged datasets.

To implement the Clean Air Allowance Trading Programs, EPA operates the Part 75 emission measurement program that requires approximately 4,150 affected units to monitor and report emission and operation data.[3] The emission measurement program requires high degrees of accuracy and reliability from continuous emission monitoring systems or approved alternative methods at the affected sources. EPA provides the affected emission sources with a software tool, the Emissions Collection and Monitoring Plan System, to process and assure the quality of data,

[1] Clean Air Act § 403(d).
[2] For additional information, please see: https://www.epa.gov/airmarkets/clean-air-markets-progress.
[3] Clean Air Act § 412; Clean Air Act Amendments of 1990. P.L. 101-549 § 821.

and facilitate reporting to EPA. The Agency conducts electronic audits, desk reviews, and field audits of the emission data and monitoring systems. The emission measurement program supports several other state and federal emission control and reporting programs.

EPA's centralized market operation system (the allowance tracking system) records allowance allocations and transfers.[4] 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 2018, total annual SO_2 emissions from Acid Rain Program-affected emission sources were 1.2 million tons, or more than 85 percent below the statutory nationwide emissions cap. Total annual 2018 NO_X emissions were 1.0 million tons, a reduction of over 7 million tons from projected 2000 NO_X levels absent the Acid Rain Program, exceeding the Program's total targeted reduction of 2 million tons.[5]

The Clean Air Act's Good Neighbor provision[6] requires states or, in some circumstances, the Agency to reduce interstate pollution that interferes with the attainment and maintenance of the National Ambient Air Quality Standards. Under this authority, EPA issued the Cross-State Air Pollution Rule, which requires 27 states in the eastern U.S. to limit their state-wide emissions of SO_2 and/or NO_X to reduce or eliminate the states' contributions to $PM_{2.5}$ and/or ground-level ozone pollution in downwind states. The emission limitations are defined in terms of maximum statewide "budgets" for emissions of annual SO_2, annual NO_X, and/or ozone-season NO_X emissions from certain large stationary sources in each state. In addition, EPA began operating the Texas SO_2 Trading Program in 2019 as a means of addressing Texas' obligations with respect to best available retrofit technology, reasonable progress, and interstate visibility transport as those obligations relate to sulfur dioxide emissions from electricity generating units.[7]

EPA relies on the Clean Air Status and Trends Network for monitoring ambient sulfate and nitrate deposition concentrations, and other air quality indicators. EPA uses the Long-Term Monitoring program for assessing how water bodies and aquatic ecosystems are responding to reductions in sulfur and nitrogen emissions. Data from these air quality and environmental monitoring programs, in conjunction with SO_2, NO_X, and CO_2 emissions data from the Part 75 monitoring 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 and the Cross-State Air Pollution Rule. Previous reports have covered progress under the Clean Air Interstate Rule and the NO_X Budget Trading Program. These annual progress reports not only track reductions in SO_2 and NO_X emissions from affected sources but assess the 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.

[4] Clean Air Act § 403(d).
[5] For more information, please see: https://www.epa.gov/sites/production/files/2019-02/view_2018_camd_emissions_data_3.xlsx.
[6] Clean Air Act § 110(a)(2)(D); see also Clean Air Act § 110(c).
[7] Clean Air Act § 110 and § 169A; see 40 CFR 52.2312.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018–2022 EPA Strategic Plan*. In FY 2021, EPA will continue to operate the Clean Air Allowance Trading Programs and the systems to assess 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 the Mercury and Air Toxics Standard Rule and Greenhouse Gas Reporting Program.[8]

Allowance tracking and compliance assessment: EPA will allocate SO_2 and NO_X allowances to affected emission sources and other account holders as established in the Clean Air Act[9] and state and federal CSAPR implementation plans. These allowance holdings will be maintained in an updated allowance tracking system (*i.e.*, central database) that will record allowance transfers.[10] At the end of each compliance period, EPA will reconcile each facility's allowance holdings against its emissions to ensure compliance for all affected sources.[11]

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 4,200 fossil-fuel-fired electric generating units.

Program Assessment: EPA will develop progress reports and other information to communicate the extent of the progress made by the Clean Air Allowance Trading Programs.[12]

Redesign System Applications: EPA will continue the redesign of its Air Markets Program Data website and Emission Monitoring Plan System desktop software. These mission critical systems support the trading programs, as well as other emissions reporting programs operated by the states and EPA. 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 operation and maintenance costs.

Assistance to States: EPA will work with states to develop emission reduction programs to comply with Clean Air Act Good Neighbor Provision and Texas SO_2 Trading program requirements.[13]

[8] See, 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*).
[9] Clean Air Act §§ 110 and 403
[10] Clean Air Act §§ 110 and 403.
[11] Clean Air Act §§ 110 and 404-405, and state CSAPR implementation plans.
[12] Government Performance and Results Act § 1115.
[13] Clean Air Act § 110(a)(2)(D).

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

For more information on program performance, please visit:
http://www.epa.gov/airmarket/progress/progress-reports.html.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$972.0) This change is an increase due to the recalculation of base payroll costs.
- (-$1,360.0 / -2.0 FTE) This decrease is a resource shift from the Clean Air Allowance Trading Program to the Federal Support for Air Quality Management Program.

Statutory Authority:

Clean Air Act.

Atmospheric Protection Program
Program Area: Clean Air
Goal: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$90,985.1***	***$95,436.0***	***$14,512.0***	***-$80,924.0***
Science & Technology	$8,044.4	$7,772.0	$0.0	-$7,772.0
Total Budget Authority	$99,029.5	$103,208.0	$14,512.0	-$88,696.0
Total Workyears	201.3	200.6	120.0	-80.6

Program Project Description:

The Atmospheric Protection Program develops and delivers data, analysis, and technical information and assistance to identify technologies and strategies for industries, states, communities, and tribes to meet Clean Air Act (CAA) obligations and other statutory requirements.

ENERGY STAR: EPA manages the ENERGY STAR Program with clearly defined support from the U.S. Department of Energy. ENERGY STAR is the recognized symbol for energy efficiency; the Program 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 through voluntary action, ENERGY STAR lowers costs for states and local governments as they design and implement plans to meet their air quality and other environmental goals. Specifically, EPA manages and implements the following activities: the specification process for more than 75 product categories and the ENERGY STAR Most Efficient recognition program; the ENERGY STAR Certified Homes Program for both single family homes and multifamily buildings; and the ENERGY STAR commercial and industrial programs. This work includes activities such as monitoring and verification, setting performance levels for building types, managing and maintaining the ENERGY STAR Portfolio Manager to measure and track energy use in buildings, and managing the ENERGY STAR brand.

Greenhouse Gas Reporting Program: EPA implements the U.S. Greenhouse Gas Reporting Program under the CAA. 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 8,000 facilities from 41 large industrial source categories in the U.S. and uses this data to improve estimates included in the *Inventory of U.S. Greenhouse Gas Emissions and Sinks*, to support federal and state-level policy development, and to share with industry stakeholders, state and local governments, the research community, and the 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 greenhouse gas. 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 Agency, 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 Clean Air Act to ensure a smooth transition from ozone depleting substances to safer alternatives.

Science, Economic, and Technical Analyses: EPA conducts a range of economic, scientific, and technical analyses for CAA regulatory actions and technical input.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018–2022 EPA Strategic Plan*. In FY 2021, EPA will provide technical, analytical, and scientific support for regulatory action consistent with the Presidential Executive Order on Promoting Energy Independence and Economic Growth, dated March 28, 2017.

In FY 2021, EPA would implement user fees for entities that participate in the ENERGY STAR program. Fee collection would start in FY 2021 after EPA undertakes a rulemaking and finalizes a fees rule. By requesting an advance appropriation of $46 million for FY 2021, the budget provides the Program the authority to use fees to operate the program in advance of collections. The fees would provide for necessary expenses, including payroll to support the development, operation, and maintenance of the ENERGY STAR Program. The legislative proposal to authorize collection and spending of the fees is included as an administrative provision in the FY 2021 President's Budget Appendix.

The Agency will continue to implement priorities and efficiencies as called for in the January 24, 2017 Presidential Memorandum on *Streamlining Permitting and Reducing Burden to Domestic Regulatory Manufacturing*. These efforts are expected to align with previously identified Executive Orders, including implementation of Executive Order 13771, Reducing Regulation and Controlling Regulatory Costs and Executive Order 13777, Enforcing the Regulatory Reform Agenda. EPA will evaluate recommendations, and where appropriate, take action to repeal, replace, or modify existing regulations to make them less burdensome.

In FY 2021, EPA will continue to implement the Greenhouse Gas Reporting Program covering a total of 41 sectors, with approximately 8,000 reporters. Focus areas for the Program will include:

- Developing and implementing regulatory revisions across multiple sectors, including oil and gas to reduce burden and streamline reporting where appropriate;
- Aligning the database management systems with those regulatory amendments; and
- Conducting a QA/QC and verification process through a combination of electronic checks, staff reviews, and follow-up with facilities when necessary.

EPA will work to complete the annual *Inventory of U.S. Greenhouse Emissions and Sinks*.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$726.0) This change is an increase due to the recalculation of base payroll costs.

- (-$81,650.0 / -121.9 FTE) This program change is a decrease that proposes elimination of appropriated funding for the partnership programs with industry, businesses, states, tribes, and localities and focuses the program on core requirements to meet CAA obligations and other statutory requirements.

- (+70.0 FTE) This program change is an increase in reimbursable FTE for the development, operation, and maintenance of a fee-supported ENERGY STAR Program. By requesting an advance appropriation of $46 million for FY 2021, the budget allows for the time involved in both a fee rulemaking and developing and enacting new authorizing legislation by providing the program the authority to use fees to operate the program in advance of collections.

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.

Federal Stationary Source Regulations
Program Area: Clean Air
Goal: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$19,279.9***	***$20,093.0***	***$17,877.0***	***-$2,216.0***
Total Budget Authority	$19,279.9	$20,093.0	$17,877.0	-$2,216.0
Total Workyears	98.2	108.5	79.1	-29.4

Program Project Description:

Under the statutory framework of the Clean Air Act (CAA), EPA is required to undertake actions pertaining to multiple aspects of air quality. The CAA requires EPA to set National Ambient Air Quality Standards (NAAQS) for ambient pollutants considered harmful to public health and the environment. The six "criteria" pollutants for which EPA has established NAAQS are: particulate matter (PM), ozone (O3), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), carbon monoxide (CO), and lead (Pb). The CAA requires EPA to periodically review the science upon which the NAAQS are based and the standards themselves. 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 statutory program direct EPA to undertake activities targeted at air emissions of toxic, criteria, and other pollutants from stationary sources. Specifically, to address air toxics, this 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 statutory program also includes issuing, reviewing, and periodically revising, as necessary, New Source Performance Standards (NSPS) for criteria and a subset of listed pollutants from certain 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 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, the Agency will continue to implement priorities and efficiencies called for in the January 24, 2017 Presidential Memorandum, *Streamlining Permitting and Reducing Regulatory Burdens for Domestic Manufacturing*. These efforts are expected to dovetail with previously identified Executive Orders, including implementation of Executive Order 13771, Reducing Regulation and Controlling Regulatory Costs and Executive Order 13777, Enforcing the Regulatory Reform Agenda. EPA will continue to evaluate recommendations, and, where appropriate, act to repeal, replace, or modify existing regulations to make them less burdensome and provide greater certainty to regulated entities.

NAAQS: In FY 2021, EPA will continue reviewing the NAAQS and make revisions, as appropriate. Each review involves a comprehensive reexamination, synthesis, and evaluation of the 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 work to achieve and maintain compliance with existing standards. These include the ozone standards established in 2015, 2008, 1997, and 1979; the 1997 PM_{10} standards; the 2012, 2006 and 1997 $PM_{2.5}$ standards; the 2008 lead standard;[14] the 2010 NO_2 standard;[15] the 1971 CO standard; and the 2010 SO_2 standard[16] (Note, pursuant to the May 9, 2018 memorandum, *Back to Basics Process for Reviewing the National Ambient Air Quality* Standards, EPA is working to complete reviews of the ozone and PM standards by late CY 2020). EPA, in close collaboration with states and tribes, will work to reduce the number of areas not in attainment with the NAAQS, including assisting states and tribes in developing CAA-compliant pollution reduction plans.

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.

[14] In September 2016, EPA completed the review of the 2008 Lead NAAQS and retained the standards without revision.
[15] In April 2018, EPA completed the review of the 2010 NO_2 NAAQS and retained the standards without revision.
[16] In February 2019, EPA completed the review of the 2010 SO_2 NAAQS and retained the standards without revision.

In FY 2021, EPA will engage in rulemaking efforts to review and revise, as appropriate, emissions standards for 14 source categories, pursuant to two separate court orders and statutory obligations. Additionally, as a result of ongoing litigation, EPA expects to undertake reviews and regulatory revisions, as applicable, under CAA Section 112 for five other source categories. EPA further anticipates work to address expected CAA-authorized requests for administrative reconsideration of some of the rules issued under Section 112 that EPA will be finalizing in 2020. These rules affect more than 25 source categories.

NSPS: 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 contribute to, air pollution that may endanger public health or welfare. Section 111 of the CAA 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) of the CAA or are emitted from a source category that is regulated under Section 112 of the CAA but to which a standard of performance would apply if such an existing source were a new source.

In FY 2021, EPA will work to address NSPS reviews, consistent with the requirements of the CAA, for sources of air pollutants for multiple source categories, including Municipal Solid Waste (MSW) Landfills, and anticipates further NSPS reviews for the Electric Utility Generating Units (EGUs); Crude Oil and Natural Gas Production, Transmission and Distribution; primary copper; and primary magnesium source categories. EPA also will address emission guidelines for MSW Landfills. Additionally, as a result of ongoing litigation, EPA expects to undertake additional NSPS reviews and regulatory revisions, as applicable, for two other source categories in FY 2021.

EPA also may undertake other projects, such as statutorily mandated, overdue NSPS and area source technology reviews related to the source categories in addition to those mentioned above. EPA will continue work on case-by-case regional and national NESHAP and NSPS applicability determinations. In addition, under Section 129 of the CAA, EPA plans to address the statutorily mandated reviews and court-ordered regulatory revisions for rules involving solid waste incineration units, such as the Commercial and Industrial Solid Waste Incinerators and Other Solid Waste Incinerators rules, and to review developments regarding incineration and control technologies to support these rulemaking efforts. In FY 2021, EPA will address program-wide issues, including court-remanded and court-vacated rules that apply across many industrial sources.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$1,410.0) This change is an increase due to the recalculation of base payroll costs.

- (-$3,626.0 / -29.4 FTE) This program change is a decrease in the Federal Stationary Source Regulations Program. As a result of this change, the Agency will work to develop a more efficient approach to meeting Clean Air Act requirements including statutorily-required NAAQS reviews. In addition, EPA will rely on states and other stakeholders to identify burden and cost-reduction actions needed to holistically improve the federal-state partnership.

Statutory Authority:

Clean Air Act.

Federal Support for Air Quality Management

Program Area: Clean Air
Goal: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$132,513.9***	***$130,588.0***	***$114,095.0***	***-$16,493.0***
Science & Technology	$10,878.2	$6,039.0	$3,712.0	-$2,327.0
Total Budget Authority	$143,392.1	$136,627.0	$117,807.0	-$18,820.0
Total Workyears	824.8	842.0	638.8	-203.2

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 sustains visibility protection. EPA develops federal measures and regional strategies that help to reduce emissions from stationary and mobile sources; whereas 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 emissions data. EPA, working with states, tribes, and local air agencies, develops methods for estimating and measuring air emissions and 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.

Under the Clean Air Act (CAA), EPA is required to set the NAAQS for ambient pollutants considered harmful to public health and the environment. The six "criteria" pollutants for which EPA has established NAAQS are: particulate matter (PM), ozone (O3), sulfur dioxide (SO2), nitrogen dioxide (NO2), carbon monoxide (CO), and lead (Pb). The CAA requires EPA to periodically review the science upon which the NAAQS are based and the standards themselves. These national standards form the foundation for air quality management and establish goals that protect public health and the environment.

NAAQS Development

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.

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. EPA works with state and local governments to ensure the technical integrity of emission source controls in State Implementation Plans (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. The 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.

Control of Air Toxics

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. Section 129 of the CAA requires a similar approach to review regulations applicable to solid waste incinerators. In addition to its regulatory work, EPA also provides determinations to states and industry seeking information about source-specific applicability of these regulations. EPA is making improvements to the database that tracks applicability determinations.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018–2022 EPA Strategic Plan.* This program also supports the FY 2020 - 2021 Agency

Priority Goal, "Improve air quality by reducing the number of areas not meeting air quality standards," and the long-term performance goal, "By September 30, 2022, reduce the number of nonattainment areas to 101." Air quality has improved significantly for communities across the country since passage of the CAA in 1970 (with amendments in 1977 and 1990). Since 1990, for example, national average levels have decreased by 21 percent for ozone, 26 percent for particulate matter, 89 percent for sulfur dioxide, and 97 percent for lead.[17] In FY 2021, 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.

NAAQS Review

In FY 2021, EPA will review the NAAQS in accordance with the CAA, including completing the ongoing NAAQS reviews for ozone and particulate matter, as well as continuing the review of the secondary NAAQS for oxides of nitrogen, oxides of sulfur and particulate matter. In addition, EPA will continue its CAA mandated responsibilities 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.

NAAQS Nonattainment Areas

EPA, in close collaboration with states and tribes, will work to reduce the number of areas not in attainment with the NAAQS. The Agency will look for ways to improve the efficiency and effectiveness of the SIP process, including its own review process, with a goal of maximizing timely processing of state-requested SIP actions and reducing the backlog. In FY 2019, EPA acted on over 360 SIPs, 165 of which were backlogged. The Agency will act on designation or re-designation of nonattainment areas to attainment in a timely manner. EPA will focus on states achieving attainment, looking at improved processes and flexible implementation options. EPA is improving transparency and tracking by continuing development of the State Plan Electronic Collaboration System or SPeCS.

SIPs for Regional Haze

In FY 2021, EPA will review and take appropriate action on SIPs for regional haze to ensure that states are making reasonable progress towards their visibility improvement goals, consistent with statutory obligations. In FY 2021, EPA will provide technical assistance to states that are developing plan revisions. 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. The first state plans were due in 2007 and covered the 2008-2018 first planning period. The second planning period covers 2018-2028.

[17]For more information, please see *Our Nation's Air: Status and Trends Through 2018*, found at: https://www.epa.gov/air-trends/air-quality-national-summary.

Regulatory Reform and Burden Reduction

The Agency will implement priorities and efficiencies as called for in the January 24, 2017 Presidential Memorandum, *Streamlining Permitting and Reducing Regulatory Burden for Domestic Manufacturing*. These efforts are expected to dovetail with previously identified Executive Orders, including implementation of Executive Order 13771, *Reducing Regulation and Controlling Regulatory Costs* and Executive Order 13777, *Enforcing the Regulatory Reform Agenda*. EPA will evaluate recommendations, and, where appropriate, repeal, replace, or modify existing regulations to make them less burdensome and provide greater certainty to regulated entities.

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. In FY 2021, EPA will conduct these periodic "technology reviews" and conduct risk assessments as required. The Program will prioritize conducting reviews of NESHAP for 14 source categories for which the statutory deadlines passed and 13 of which are now subject to court-ordered dates. EPA expects to similarly prioritize reviews for the five source categories currently subject to litigation.

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 determine that the emissions caused by their actions will conform to the SIP.

In FY 2021, 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 will continue development of the Electronic Permitting System, which is expected to improve EPA interaction with state, local, and tribal air agencies 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.[18] The Agency will maintain the core function of these tools (*e.g.,*

[18] For additional information, please see: https://www.epa.gov/technical-air-pollution-resources.

integrated multiple pollutant emissions inventory, air quality modeling platforms, etc.) to provide the technical underpinnings for scientifically sound, more efficient and comprehensive air quality management by state, local, and tribal agencies.

In FY 2021, state and local air agencies will have the lead in implementing the National Air Toxics Trends Sites (NATTS). The NATTS is designed to capture the impacts of widespread air toxics and is comprised of permanent monitoring sites throughout the nation.[19] EPA will consult on priority data gaps to better assess population exposure to toxic air pollution.

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.

In FY 2021, EPA will 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's national real-time ambient air quality data system (AirNow) will maintain baseline operations. 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). The NEI is used by EPA, states, and others to support state and local air agency SIP development, to serve as a vital input to air quality modeling, help to analyze the public health risks from air toxics and develop strategies to manage those risks, as well as support multi-pollutant analysis covering air emissions. EPA will continue to implement previously identified Lean strategies to streamline NEI development and reduce the burden for industry to meet their 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 to improve decision-making capacity through more timely availability of data.

Performance Measure Targets:

(PM NA1) Number of Nonattainment Areas.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					155	138	132	121	Nonattain-ment Areas
Actual	190	182	176	166	159	147			

[19] For additional information, please see: http://www.epa.gov/ttn/amtic/airtoxpg.html.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$9,580.0) This change is an increase due to the recalculation of base payroll costs.

- (-$26,409.0 / -202.1 FTE) This program change is a decrease in EPA's technical assistance to and support of state, tribal, and local air programs, including those that develop and implement clean air plans, issue air permits, and provide air quality information to the public. The Agency will prioritize supporting state and local air agencies in obtaining air quality improvements necessary to bring areas into attainment.

- (+$336.0 / +2.0 FTE) This increase is a resource shift from the Clean Air Allowance Trading program to the Federal Support for Air Quality Management program.

Statutory Authority:

Clean Air Act.

Stratospheric Ozone: Domestic Programs
Program Area: Clean Air
Goal: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$5,060.4***	***$4,661.0***	***$4,087.0***	***-$574.0***
Total Budget Authority	$5,060.4	$4,661.0	$4,087.0	-$574.0
Total Workyears	19.9	18.9	18.0	-0.9

Program Project Description:

The stratospheric ozone layer protects life by shielding the Earth's surface from harmful ultraviolet (UV) radiation. Scientific evidence demonstrates that ozone-depleting substances (ODS) used around the world destroy the stratospheric ozone layer,[20] which raises the incidence of skin cancer and other illnesses through overexposure to increased levels of UV radiation.[21]

EPA estimates that in the U.S. alone, the worldwide phase out of ODS will avert millions of cases of non-fatal and fatal skin cancers (melanoma and non-melanoma), as well as millions of cataract cases, which is the leading cause of blindness. Full implementation of the *Montreal Protocol on Substances that Deplete the Ozone Layer* (Montreal Protocol) globally, including its amendments and adjustments, is expected to avoid more than 280 million cases of skin cancer, approximately 1.6 million skin cancer deaths, and more than 45 million cases of cataracts in the U.S. among individuals born between 1890 and 2100.[22]

EPA implements provisions of the Clean Air Act Amendments of 1990 (CAA) and the Montreal Protocol, resulting in the reduction of ODS in the U.S. and lower health risks to the American public. EPA uses a combination of regulatory and partnership programs to protect and restore the ozone layer. The CAA provides for a phase-out 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. The CAA also prohibits venting ODS and

[20] World Meteorological Organization (WMO). Scientific Assessment of Ozone Depletion: 2014. Global Ozone Research and Monitoring Project–Report No. 56, Geneva, Switzerland. 2014.
[21] 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://www.esrl.noaa.gov/csd/assessments/ozone/2014/twentyquestions2014update.pdf.
[22] EPA, Updating ozone calculations and emissions profiles for use in the Atmospheric Health Effects Framework Model (2015). Available on the internet at: https://www.epa.gov/sites/production/files/2015-11/documents/ahef_2015_update_report-final_508.pdf.

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.

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. With U.S. leadership, in 2007 the Parties to the Montreal Protocol agreed to a more aggressive phase-out for ozone-depleting hydrochlorofluorocarbons (HCFCs) equaling a 47 percent reduction in overall emissions during the period 2010-2040. The adjustment in 2007 also calls on Parties to promote the selection of alternatives to HCFCs that minimize environmental impacts, in particular impacts on climate.[23] In 2016, the Parties to the Montreal Protocol agreed to the Kigali Amendment,[24] which will globally phase down production and consumption of hydrofluorocarbons (HFCs). HFCs are intentionally manufactured fluorinated greenhouse gases used in all the same sectors as ODS such as air conditioning, refrigeration, fire suppression, solvents, foam blowing agents, and aerosols. In 2018, the Parties to the Montreal Protocol agreed to adjust the HCFC phaseout's servicing provisions to, among other things, allow for servicing of existing fire suppression equipment until 2030.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. In carrying out the requirements of the CAA and the Montreal Protocol in FY 2021, EPA will continue to meet its ODS import caps and work toward the gradual reduction in production and consumption of ODS. EPA is planning to implement a notice-and-comment rulemaking finalized in FY 2020 that will allow EPA to issue HCFC allowances and codify the servicing provision changes under the Montreal Protocol. To meet targets for FY 2021 and beyond, 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 Business Information 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 also will prepare and submit an annual report under Article 7 of the Montreal Protocol on U.S. consumption and production of ODS.[25]

CAA Section 612 requires continuous review of alternatives for ODS through EPA's Significant New Alternatives Policy (SNAP) program[26] to find those that pose less overall risk to human health and the environment and to promote a smooth transition to safer alternatives. Through these evaluations, SNAP generates lists of acceptable and unacceptable substitutes for approximately 50

[23] *Montreal Protocol Decision XIX/6: Adjustments to the Montreal Protocol with regard to Annex C, Group I, substances (hydrochlorofluorocarbons).*

[24] Amendment 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.

[25] 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

[26] For more information, please see: http://www.epa.gov/ozone/snap/index.html.

end uses across eight industrial sectors. In *Mexichem Fluor v. EPA*, the 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 to a 2016 rule similarly. EPA expects to finalize a notice-and-comment rulemaking in FY 2020 that would address the court's decisions, including potentially making changes to the SNAP Program's scope and applicability. In addition, EPA will consider a number of submissions and petitions that would expand the list of acceptable alternatives, particularly for end-uses where there is an urgent need for more options. The schedule for other approvals will be adjusted through FY 2021. Certain approvals adjusted for FY 2020 will be taken up with other pending approvals in FY 2021, to the extent practicable, as EPA seeks to minimize the risk to the investment made by companies in research, and development, and testing phases given that SNAP listings are critical to the commercialization of many substitutes and alternative technologies in key sectors of use. Final agency action can include notices of acceptability listings as well as notice-and-comment rulemaking. EPA also will continue to work towards ensuring the uptake of safer alternatives and technologies, while supporting innovation, and ensuring adoption through support for changes to industry codes and standards.

In FY 2021, EPA is planning to implement a revised CAA Section 608 rule that the Agency intends to finalize in FY 2020. That rule revisits certain aspects of the extension of the Section 608 refrigerant management program to substitute refrigerants. At the same time, EPA will continue efforts under CAA Section 608 to reduce emissions of refrigerants during the service, maintenance, repair and disposal of air conditioning and refrigeration equipment. EPA will continue to educate stakeholders about the rules concerning servicing, maintenance, repair and disposal of air conditioning and refrigeration appliances. EPA will monitor industry standards and may adopt the standards into its regulations through incorporation by reference, as appropriate.

EPA will continue to support the CAA Section 609 motor vehicle air conditioning (MVAC) servicing program to reduce emissions of refrigerants from MVAC systems. Where industry consensus standards are available that EPA considers to be sufficient for protection of human health and the environment, EPA may adopt the standards into its regulations through incorporation by reference. EPA is aware of such standards developed by the Society of Automotive Engineers (SAE) for recovery equipment for new alternatives. EPA intends to issue a proposed rule in FY 2020 to incorporate by reference these industry, consensus-based standards for MVAC systems that use refrigerants currently listed as acceptable, subject to use conditions. EPA intends to finalize this rule in FY 2021.

In FY 2021, EPA will continue to support implementation of the Montreal Protocol domestically by ensuring U.S. interests are represented at Montreal Protocol meetings by providing technical expertise. The Agency will provide technical expertise for the Montreal Protocol's Technology and Economic Assessment Panel and its Technical Options Committees.

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 reviews available market and reported data to monitor availability of recycled and reclaimed ODS, where production and import of new material is phased out. EPA also will implement other provisions of the Montreal Protocol, including exemption programs to allow for a continued

smooth phase out of ODS, in particular HCFCs and halons.

Additionally, EPA will continue to work with federal and international agencies to stem illegal imports of ODS to support a level playing field for companies that have transitioned to non-ODS alternatives. This is particularly important in light of recent atmospheric measurements showing unexpected increased emissions of CFC-11, an ODS phased out of production globally.[27,28] EPA will continue data exchange with U.S. Customs and Border Protection and Homeland Security Investigations on ODS importers and exporters to determine admissibility and target illegal ODS shipments entering the United States, as well as reviewing and approving ODS imports flagged in the Automated Customs Environment.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$53.0) This change is an increase due to the recalculation of base payroll costs.
- (-$627.0 / -0.9 FTE) This program change is a decrease to program resources and FTE related to activities for development of outreach and compliance assistance materials.

Statutory Authority:

Title VI of the Clean Air Act.

[27] 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.
[28] 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.

Stratospheric Ozone: Multilateral Fund
Program Area: Clean Air
Goal: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$8,326.0***	***$8,711.0***	***$0.0***	***-$8,711.0***
Total Budget Authority	$8,326.0	$8,711.0	$0.0	-$8,711.0

Program Project Description:

The *Montreal Protocol on Substances that Deplete the Ozone Layer* (Montreal Protocol) facilitates a global phaseout of ozone-depleting substances (ODS). The United States implements its treaty obligations primarily through Title VI of the Clean Air Act.

The *Multilateral Fund for the Implementation of the Montreal Protocol* (Multilateral Fund) was created by the Parties to the Montreal Protocol to provide funds to enable developing countries to comply with their Montreal Protocol obligations to phase out the use of ODS on an agreed schedule. The United States and other developed countries contribute to the Multilateral Fund. The U.S. contribution to the Multilateral Fund is split between EPA and the Department of State.

FY 2021 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2021. EPA will continue domestic ODS reduction work.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$8,711.0) This funding change proposes to eliminate resources to support EPA participation in the Multilateral Fund.

Statutory Authority:

Title VI of the Clean Air Act.

Brownfields

Brownfields
Program Area: Brownfields
Goal: A Cleaner, Healthier Environment
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$22,939.3***	***$23,647.0***	***$17,816.0***	***-$5,831.0***
Total Budget Authority	$22,939.3	$23,647.0	$17,816.0	-$5,831.0
Total Workyears	117.0	127.5	92.6	-34.9

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 129 million people (roughly 40 percent of the U.S. population) live within three miles of a brownfields site that receives EPA funding.[29] As of January 2020, grants awarded by the Program have led to over 88,900 acres of idle land made ready for productive use and over 156,500 jobs and $29.5 billion leveraged.[30]

This Program supports the operating expenses for the Brownfields Program. 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 Exchanges 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.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination, in the *2018 – 2022 EPA Strategic Plan*. In FY 2021, the Brownfields Program will continue to manage approximately 900 assessment, cleanup, revolving loan fund (RLF), multi-purpose, and Environmental Workforce Development and Job Training (EWDJT) cooperative

[29] U.S. EPA, Office of Land and Emergency Management Estimate 2017. Data collected includes: (1) site information as of the end of 2016; and (2) census data from the 2011-2015 American Community Survey.
[30] EPA's ACRES database.

agreements; as well as state and tribal assistance agreements; training, research, and technical assistance agreements; Targeted Brownfields Assessments and land revitalization projects.

In FY 2021, the Brownfields Program will support the following activities:

- **Compete and Award New Cooperative Agreements**: Review, select, and award an estimated 360 new cooperative agreements which will lead to approximately $1.2 billion and 7,100 jobs leveraged in future years.

- **Oversight and Management of Existing Cooperative Agreements:** Continue federal fiduciary responsibility to manage approximately 900 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 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$1,856.0) This change is an increase due to the recalculation of base payroll costs.

- (-$7,687.0 / -34.9 FTE) This net program change reduces funding for managing and closing out assistance agreements, data collection analysis, and system enhancements.

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.

Compliance

Compliance Monitoring
Program Area: Compliance
Goal: More Effective Partnerships
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$100,132.8***	***$101,665.0***	***$95,649.0***	***-$6,016.0***
Inland Oil Spill Programs	$82.8	$139.0	$0.0	-$139.0
Hazardous Substance Superfund	$1,313.8	$995.0	$1,004.0	$9.0
Total Budget Authority	$101,529.4	$102,799.0	$96,653.0	-$6,146.0
Total Workyears	447.1	453.9	427.7	-26.2

Program Project Description:

The Compliance Monitoring Program is a key component of EPA's Compliance Assurance Program that allows the controlling regulatory authority to detect noncompliance. The Compliance Monitoring Program also promotes compliance with the Nation's environmental laws. Effective targeting of compliance monitoring plays a critical role in achieving the goals EPA has set forth for protecting health and the environment. The states and EPA use compliance monitoring tools and activities to identify whether regulated entities are complying with environmental laws enacted by Congress, as well as applicable regulations and permit conditions. In addition, compliance monitoring activities, such as inspections, investigations, and review of self-reported compliance monitoring information, are conducted to determine whether conditions exist that may present imminent and substantial endangerment to human health and the environment. In FY 2019, EPA exceeded its compliance monitoring target of 10,000 by conducting 10,300 compliance monitoring activities. This total includes on-site inspections and some off-site compliance monitoring activities.

In July 2019, EPA's Enforcement and Compliance Assurance Program issued a policy titled *"Enhancing Effective Partnerships Between the EPA and the States in Civil Enforcement and Compliance Assurance Work"* to create more effective partnerships with states, localities, and federally-recognized Indian tribes.[31] The Compliance Monitoring Program supports enhanced partnerships and the expanded use of compliance assurance tools (such as compliance assistance) among state, tribal, local, and federal partners. States, tribes, and EPA have policies/procedures on the appropriate use of the tools in our compliance assurance tool box, with states undertaking the majority of enforcement and compliance activities in authorized programs. EPA is working to implement the Program in the most efficient manner possible by leveraging information technology systems and improving business processes. Tools in the Compliance Monitoring Program include:

[31] For more information, please see EPA policy: Enhancing Effective Partnerships Between the EPA and the States in Civil Enforcement and Compliance Assurance Work (July 11, 2019).

- **Compliance Assistance:** EPA collaborates with state, local, federal, tribal, and industry partners through the E-Enterprise initiative which allows the states, the regulated community, and EPA to transact business such as permitting and reporting. EPA also will continue its compliance assistance work by continuing to partner with third-party organizations and federal agencies to support existing web-based, sector-specific centers and other web-based assistance resources.

- **Full Electronic Reporting with Compliance Assistance:** 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. ICIS collects enforcement and compliance data, and EPA utilizes those data and other information technology tools to: identify potential violations of the federal environmental laws; facilitate efficient enforcement; and 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. Currently, EPA and states are implementing the National Pollution Discharge Elimination System (NPDES) Electronic Reporting Rule through ICIS.[32] Phase one of the rule was implemented in FY 2017 for NPDES Discharge Monitoring Reports (DMRs), including compliance assistance features such as electronic reminders to state and federal permittees that may have missed their compliance monitoring report deadlines. More than 20 states currently use EPA's electronic reporting tools for DMR reporting and reporting of other required information such as General Permit Notices of Intent.

- **Smart Tools for Field Inspectors:** EPA has developed software solutions to improve the effectiveness and efficiency of how EPA and authorized states conduct compliance inspections, starting with the Resource Conservation and Recovery Act (RCRA) Hazardous Waste Program. This will be followed by Smart Tools for the NPDES Program and the Clean Air Act.

- **Circuit Riders:** EPA is increasing resources for circuit riders to provide effective on-the-ground assistance to help public water systems and wastewater systems achieve and sustain environmental compliance. This program would include assistance in Indian Country where systems and facilities are disproportionately small and isolated. Circuit riders will provide in-the-field technical assistance to drinking water and wastewater systems that have been consistently out of compliance. In addition to supporting drinking water and wastewater needs, tribes will be offered additional multimedia assistance with respect to underground injection wells, underground storage tanks, and other programs as appropriate.

- **Compliance Monitoring Inspector Credential Policies and Training for EPA and States and Tribes:** To ensure the quality of compliance monitoring activities, EPA

[32] For more information, please see: https://www.epa.gov/compliance/npdes-ereporting.

develops national policies, updates inspection manuals, establishes training requirements for inspectors, and issues inspector credentials. As a result of EPA audits, recommendations and findings of the inspector credential possession and training documentation, in FY 2020, EPA is implementing a new streamlined inspector credentialing process to ensure greater integrity in the inspector credentialing process and make the operation more efficient. The findings and recommendations from those audits are being used to improve the documentation supporting EPA inspector credentials. For example, EPA estimates that shifting from the current paper process to an electronic one will decrease the total time it takes to provide credentials to an inspector by approximately 80 percent.[33]

In addition, 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 and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Pesticide Inspector Residential Training Program. These on-site inspector training programs deliver in-depth technical and programmatic content to hundreds of inspectors nationwide. EPA's National Enforcement Training Institute (NETI) provides over one hundred on-line training courses for EPA and state, local, and tribal co-regulators and enforcement partners. NETI provides webinars, and other relevant training for case development officers, attorneys, and investigators. NETI also oversees the annual Trial Advocacy workshop for new EPA attorneys.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, EPA will continue to streamline its compliance monitoring activities such as field inspections, data tools, and assistance. EPA will focus principally on 1) those programs that are not delegated to states ("direct implementation"), and 2) where EPA's expertise or unique role is best suited to address the issue. This includes, but is not limited to, multi-state/multi-regional matters, issues of national significance, and emergency situations. In addition, EPA will provide some targeted oversight and support to state, local, and tribal programs. To accomplish this, the Agency will prioritize work with states to develop methods that successfully leverage advances in both monitoring and information technology. Also, the Agency will maintain accessibility to ICIS for EPA, states, and tribes.

In addition, the Agency will continue to implement Phase two of the NPDES Electronic Reporting Rule which covers the e-reporting rule permitting and compliance monitoring requirements for EPA and states. EPA will work with states to evaluate and prioritize the development of additional electronic reporting tools that support states. EPA's centralized development of electronic reporting tools saves the states significant resources in information technology development costs.

[33] Based on a technical evaluation from the *kaizen* event: Leaning the Civil Inspector Credentialing Process, July 17-19, 2018. The current practice takes approximately 127 days. The new process is estimated to take 25 days.

In FY 2021, EPA will continue its support for the Circuit Riders Program to provide effective on-the-ground assistance to help public water systems and wastewater systems achieve and sustain environmental compliance. This includes assistance in Indian Country where systems and facilities are disproportionately small and isolated. The Program supports circuit riders to provide in-the-field technical assistance to drinking water and wastewater systems that have been consistently out of compliance. In addition to supporting drinking water and wastewater needs, tribes will be offered technical assistance with respect to underground injection wells, underground storage tanks, and other programs as appropriate.

EPA engaged with states, tribes, and local governments to gather input on the selection of enforcement and compliance assurance priorities and in June 2019 announced its FY 2020 - FY 2023 National Compliance Initiatives (NCIs).[34] EPA will focus its resources on these NCIs to advance the Agency's strategic objectives to improve air quality, provide for clean and safe water, ensure chemical safety, continue compliance with the law, and enhance shared accountability.

Performance Measure Targets:

(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target	17,000	15,500	15,500	14,000	10,000	10,000	10,000	10,000	Inspections & Evaluations
Actual	16,000	15,400	13,500	11,800	10,600	10,300			

Work under this program supports performance results in the Civil Enforcement Program under the EPM appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$4,827.0) This change is an increase due to the recalculation of base payroll costs.
- (-$14,716.0 / -25.4 FTE) This net program change recognizes that states conduct the majority of inspections, an EPA focus on direct implementation programs, and an increased reliance on technology rather than on-site inspections to monitor compliance.
- (+$1,100.0) This increase supports on-the-ground technical assistance using circuit riders. Efforts are targeted to provide compliance assistance at drinking and wastewater systems across the nation and multi-media assistance in Indian Country.
- (+$2,773.0) This net change to fixed and other costs is an increase due to the recalculation of rent, utilities, and security or lab fixed costs.

[34] For more information please see *FY2020 - FY2023 National Compliance Initiatives*: https://www.epa.gov/enforcement/fy2020-fy2023-national-compliance-initiatives.

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.

Enforcement

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$160,202.2***	***$167,615.0***	***$157,820.0***	***-$9,795.0***
Leaking Underground Storage Tanks	$678.1	$620.0	$541.0	-$79.0
Inland Oil Spill Programs	$2,393.3	$2,413.0	$2,462.0	$49.0
Total Budget Authority	$163,273.6	$170,648.0	$160,823.0	-$9,825.0
Total Workyears	908.3	916.2	857.1	-59.1

Program Project Description:

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. EPA will seek to strengthen environmental partnerships with its state and tribal partners, encourage regulated entities to correct violations rapidly, ensure that violators do not realize an economic benefit from noncompliance, and pursue enforcement to deter future violations.

The Agency works closely with the U.S. Department of Justice, states, tribal governments, territories, and local agencies to ensure consistent and fair enforcement of all major environmental statutes, distinct programs under those statutes, and numerous regulatory requirements under those programs, which apply in various combinations to millions of regulated federal and private entities. The Civil Enforcement Program develops, litigates, and settles administrative and civil judicial cases against serious violators of environmental laws. In FY 2019, EPA reduced the number of all referred no complaint filed (RNCF) civil judicial cases that are more than 2.5 years old to 94, below the target of 129. In addition, EPA also increased the percentage of inspection reports that EPA provides to facilities within 70 days of inspection to 81 percent (from a baseline of 46 percent). EPA also increased documentable EPA administrative enforcement actions/activities, producing correction of violations from 74 to 184. These activities serve to increase the speed of correcting violations. In FY 2019, because of EPA enforcement actions, approximately 350 million pounds of pollutants and waste were reduced, treated, or eliminated.

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. ICIS collects enforcement and compliance data, and EPA utilizes the data and other information technology tools to identify potential violations of federal environmental laws, facilitating efficient enforcement and promoting compliance with these requirements. In addition, 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 ensure its enforcement resources will address the most significant noncompliance and facilitate transparency.

EPA also maintains a National Enforcement Training Institute (NETI) that is responsible for training federal, state, and local inspectors, civil and criminal investigators, and technical experts in the enforcement of the Nation's environmental laws. NETI provides webinars, in-person training, and e-learning opportunities for trainees. NETI also oversees the Annual Trial Advocacy Institute, which provides comprehensive trial advocacy training for new EPA attorneys.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in the *FY 2018 – 2022 EPA Strategic Plan*. Work in this program supports the long-term performance goal: By September 30, 2022, increase the environmental law compliance rate.

In FY 2021, EPA will continue to focus efforts toward areas where, in support of the goals of the *FY 2018 – 2022 EPA Strategic Plan*, EPA's enforcement actions can address the most substantial impacts to human health and the environment. This work supports the Agency's long-term performance goals to reduce the average time from violation identification to correction and, to increase the environmental law compliance rate, both by September 30, 2022. EPA engaged with states, tribes, and local governments to gather their input on the selection of enforcement and compliance assurance priorities and in June 2019 announced its FY 2020 – FY 2023 National Compliance Initiatives (NCIs).[35] EPA will focus its resources on these NCIs to advance the *FY 2018 – 2022 EPA Strategic Plan* objectives to improve air quality, provide for clean and safe water, ensure chemical safety, and improve compliance with our nation's environmental laws while enhancing shared accountability between EPA and states and tribes with authorized environmental programs.

Recognizing the role of states and tribes as the primary implementers where authorized by EPA to implement the federal statutes, EPA will focus civil enforcement resources on direct implementation responsibilities, as well as assisting authorized states and tribes in meeting national standards, such as by providing expertise and implementing compliance monitoring and civil enforcement strategies that will ensure a level playing field. 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 particular program (or program component). Examples include the Clean Air Act (CAA) mobile source program, pesticide labeling and registration under the Federal Insecticide, Fungicide, and Rodenticide Act, enforcement in Indian Country, and enforcement of non-delegated portions of various other laws, including the Resource Conservation and Recovery Act (RCRA), the Clean Water Act, the Safe Drinking Water Act, and the CAA. On July 11, 2019, EPA issued a memorandum on enhancing effective partnerships with states that are authorized to implement federal environmental laws, to effectively carry out our shared responsibilities under those laws.[36]

[35] For more information, please see: https://www.epa.gov/enforcement/fy2020-fy2023-national-compliance-initiatives.
[36] For more information, please see: Enhancing Effective Partnerships Between the EPA and the States in Civil Enforcement and Compliance Assurance Work (July 11, 2019).

In addition, EPA ensures cleanup (corrective action) at RCRA facilities. For example, closely coordinating with states, EPA can issue cleanup orders to RCRA facilities to help meet the RCRA Corrective Action Program's goals. EPA also will pursue enforcement actions at federal facilities where significant violations are discovered and ensure that federal facilities are held to the same standards as the private sector and will provide technical and scientific support to states and tribes with authorized programs. The Agency also will carry out its statutory oversight responsibilities and will offer assistance to states in their implementation of delegated programs when needed or in cases where the Agency maintains a unique expertise or capability.

In FY 2021, under one of the six NCIs, EPA will continue to track the rate of significant non-compliance (SNC) with National Pollutant Discharge Elimination System (NPDES) program requirements quarterly to assess progress with EPA's goal of reducing the SNC rate. Continuing efforts initiated in FY 2018, EPA will implement identified approaches in focus areas to achieve SNC rate reductions with the goal of reducing the rate by 50 percent by the end of FY 2022. In FY 2019, EPA reduced the percentage of permittees in significant noncompliance with their permit from 29.4 percent to 25 percent. To achieve this goal, the Agency established an EPA-state workgroup to develop and implement approaches for reducing the SNC rate in areas where EPA and/or authorized states can have a significant impact. The Agency will continue efforts to reduce the NPDES SNC rate by a full 50 percent as an EPA FY 2020 – 2023 National Compliance Initiative. EPA also will continue to review the rate of electronic reporting for each authorized NPDES state program and work with states to achieve improved reporting.

Performance Measure Targets:

(PM 432) Percentage of Clean Water Act National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					24	25.7	22.1	18.4	Percent
Actual					22	25.0			
Numerator					12,017	10,141			Permittees
Denominator					53,545	40,606			

(PM 434) Millions of pounds of pollutants and waste reduced, treated, or eliminated through concluded enforcement actions.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					325	325	325	325	Millions of Pounds
Actual	1,221	1,030	62,223	461	810	347			

(PM 436) Number of all referred no complaint filed (RNCF) civil judicial cases that are more than 2.5 years old.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target						129	120	120	Cases
Actual						94			

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$9,541.0) This change is an increase due to the recalculation of base payroll costs.

- (-$24,563.0 / -58.8 FTE) This net program change recognizes that states are primary implementers of our nation's environmental laws. EPA will focus on matters affecting multiple states or tribes, serve as a backstop in instances when a state or tribe does not timely or appropriately address serious noncompliance, and assist a state or tribe in remedying noncompliance problems when it is unable to address the problem because it lacks the capability, resources, or will. This change includes a reduction in resources for cases that do not meet these criteria.

- (+$5,227.0) This net change to fixed and other costs is an increase due to the recalculation of rent, utilities, and security or lab fixed 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 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; Safe Drinking Water Act; Small Business Regulatory Enforcement Fairness Act; and Toxic Substances Control Act.

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$46,342.0***	***$47,635.0***	***$46,627.0***	***-$1,008.0***
Hazardous Substance Superfund	$7,492.9	$7,645.0	$8,479.0	$834.0
Total Budget Authority	$53,834.9	$55,280.0	$55,106.0	-$174.0
Total Workyears	234.6	256.7	220.6	-36.1

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 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 United States Attorneys and the Department of Justice's Environmental Crimes Section. In FY 2019, the conviction rate for criminal defendants charged as a result of EPA criminal enforcement investigations was 98 percent.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, EPA will continue to focus its resources on the most egregious cases (e.g., significant human health, environmental, and deterrent impacts), while balancing its overall case load across all environmental statutes. The Criminal Enforcement Program 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 as effectively as possible. The Agency will perform targeted investigations of 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 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$5,745.0) This change is an increase due to the recalculation of base payroll costs.

- (-$8,262.0 / -36.1 FTE) This net program change reflects a focus on the most egregious cases and increased coordination with the Civil Enforcement program, and a reduction in resources for small cases that have limited deterrence value.

- (+$1,509.0) This net change to fixed and other costs is an increase due to the recalculation of rent, utilities, and security or lab fixed costs.

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.

Environmental Justice
Program Area: Enforcement
Goal: More Effective Partnerships
Objective(s): Increase Transparency and Public Participation

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$5,033.5***	***$9,554.0***	***$2,729.0***	***-$6,825.0***
Hazardous Substance Superfund	$662.2	$633.0	$0.0	-$633.0
Total Budget Authority	$5,695.7	$10,187.0	$2,729.0	-$7,458.0
Total Workyears	29.1	34.9	4.0	-30.9

Program Project Description:

EPA's Office of Environmental Justice (OEJ) coordinates the Agency's efforts to address the needs of vulnerable populations by decreasing environmental burdens, increasing environmental benefits, and working collaboratively to build healthy, sustainable communities. OEJ provides financial and technical assistance to communities working constructively and collaboratively to address environmental justice issues. OEJ also works with local, state, and federal governments; tribal governments; community organizations; business and industry; and academia to establish partnerships seeking to achieve protection from environmental and health hazards for all people regardless of race, color, national origin, or income. In FY 2019, EPA implemented a series of training webinars focused on integrating environmental justice at the state level. Over 4,000 individuals registered for this webinar series with representatives from all fifty states, Washington DC and Puerto Rico and included state environmental, public health, planning and transportation agencies. EPA's FY 2019 Environmental Justice (EJ) grants program focused on disaster preparedness, response, and recovery; issues related to homelessness and military veterans; and organizations which have not recently received an EJ grant. EPA's FY 2020 EJ grants program will again fund our Collaborative Problem Solving Cooperative Agreements, which provide a larger level of support over a longer time period for projects which have attracted dedicated partnership involvement.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.2, Increase Transparency and Public Participation in the *FY 2018 – 2022 EPA Strategic Plan*. In accordance with the 2018 American Water Infrastructure Act, every EPA regional office employs a dedicated EJ coordinator and the Agency maintains a list of these persons on EPA's website.[37]

In FY 2021, EPA will: continue to support the Environmental Justice Collaborative Problem-Solving cooperative agreements awarded in FY 2020 to support community-based organizations;

[37] For more information on EPA's regional office contacts, please see: https://www.epa.gov/environmentaljustice/forms/contact-us-about-environmental-justice.

compete the Environmental Justice Small Grants awards; and continue to provide Environmental Justice Technical Assistance for Communities to support the technical needs of low income, minority and tribal/indigenous populations. The Agency has five measures of national EJ significance that are annually tracked. Results are published in EPA's annual EJ reports.[38]

In FY 2021, EPA will continue to support the efforts of the National Environmental Justice Advisory Council, including completion of its recommendations focused on efficiently and effectively remediating Superfund sites for future redevelopment and revitalization of neighboring communities with environmental justice concerns. EPA also will continue to lead the Interagency Working Group on Environmental Justice (EJ IWG) and work collaboratively on all decisions and activities of the EJ IWG.

In FY 2021, EPA will continue to employ process improvements. In FY 2019, process improvements led to an immediate improvement in the EJ Hotline's ability to respond within its established goal of 20 days after receiving a customer inquiry, improving the response rate from 62 percent of the time to 95 percent. EPA has subsequently revised its goal of responding within 20 days from 85 percent to 93 percent of the time. In FY 2019, EPA performed 134 trainings that reached over 1,400 participants representing at least 290 distinct stakeholder groups. The Agency additionally held over 400 other engagements such as consultations or educational events which reached at least 3,700 individuals representing over 1,000 stakeholder groups. In FY 2021, EPA will continue to use process improvements to strategically enhance and improve EPA's EJ Program.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$120.0) This change is an increase due to the recalculation of base payroll costs.

- (-$6,945.0 / -27.4 FTE) This program change reflects a focus on providing financial assistance grants to community-based organizations and technical assistance to low income, minority, and tribal/indigenous populations. This change proposes to eliminate support for the EJ hotline, engagements with vulnerable and overburdened communities, and EJ trainings.

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).

[38] For more information, please see: https://www.epa.gov/environmentaljustice/annual-environmental-justice-progress-reports.

NEPA Implementation
Program Area: Enforcement
Goal: More Effective Partnerships
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$13,827.4***	***$15,833.0***	***$17,937.0***	***$2,104.0***
Total Budget Authority	$13,827.4	$15,833.0	$17,937.0	$2,104.0
Total Workyears	84.1	88.9	95.5	6.6

Program Project Description:

Pursuant to the National Environmental Policy Act (NEPA) and §309 of the Clean Air Act (CAA), EPA's NEPA Implementation Program coordinates and comments on the environmental review of major federal actions and ensures the §309 draft and final EIS comment letters are made publicly available. The Program guides EPA's compliance with NEPA, and other related statutes and executive orders. The Program manages the official Environmental Impact Statement (EIS) filing system for all federal EISs, in accordance with a Memorandum of Understanding (MOU) with the Council on Environmental Quality (CEQ).[39] EPA uses e-NEPA, a web-based system, as the official EIS filing system for federal agencies and EIS clearinghouse to meet the CEQ MOU commitments. All §309 comment letters are publicly available on e-NEPA. The NEPA Implementation Program also operates, uses, and promotes NEPAssist, a publicly available geographic information system to help users (EPA, other federal agencies, and the public) with environmental reviews under NEPA. The Program also is responsible for managing the review of Environmental Impact Assessments of non-governmental activities in Antarctica, in accordance with the Antarctic Science, Tourism, and Conservation Act.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, EPA will focus its reviews on areas where EPA has statutory authority and subject matter expertise. EPA will continue to work with the Office of Management and Budget, CEQ, and other federal agencies to evaluate ways to coordinate, streamline, and improve the NEPA process. In FY 2019, the NEPA Implementation Program reviewed and commented on 286 EISs, numerous environmental assessments, and 25 initial environmental evaluations in Antarctica. EPA was engaged early with the lead federal agency on 84 percent of projects where a draft EIS was published.

[39] Memorandum of Agreement No. 1 Between the Council on Environmental Quality and the Environmental Protection Agency, October 1977.

In support of EPA efforts to implement Executive Order 13807: "Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects[40];" the Memorandum of Understanding Implementing One Federal Decision; Executive Order 13766: "Expediting Environmental Reviews and Approvals for High Priority Infrastructure Projects[41];" and the FAST-41 ACT[42]; the NEPA Implementation Program will partner with federal agencies on proposed projects throughout the NEPA process to provide expertise and recommendations and focus efforts on early engagement prior to the publication of the draft EIS. Early engagement by stakeholders in the NEPA process can support efficiencies and improved project outcomes. Early engagement may involve meeting with the lead agency in person or by phone or providing written comments with recommendations to mitigate impacts of the proposed project or improve the development of the NEPA analysis.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$1,829.0) This change is an increase due to the recalculation of base payroll costs.

- (+$2,500.0 / +15.0 FTE) This program change is an increase to support the implementation of FAST-41, Executive Order 13807, and the Memorandum of Understanding implementing One Federal Decision.

- (-$2,225.0 / -8.4 FTE) net program change is an increase to support and improve EPA's NEPA environmental review and permitting process for infrastructure projects.

Statutory Authority:

NEPA; 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; Title 41 of the Fixing America's Surface Transportation Act.

[40] For additional information, please refer to: https://www.whitehouse.gov/presidential-actions/presidential-executive-order-establishing-discipline-accountability-environmental-review-permitting-process-infrastructure/.
[41] For additional information, please refer to: https://www.whitehouse.gov/presidential-actions/executive-order-expediting-environmental-reviews-approvals-high-priority-infrastructure-projects/.
[42] For additional information, please refer to: https://www.govinfo.gov/content/pkg/PLAW-114publ94/html/PLAW-114publ94.htm.

Geographic Programs

Geographic Program: Chesapeake Bay

Program Area: Geographic Programs
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$72,800.7***	***$85,000.0***	***$7,300.0***	***-$77,700.0***
Total Budget Authority	$72,800.7	$85,000.0	$7,300.0	-$77,700.0
Total Workyears	34.1	38.2	0.0	-38.2

Program Project Description:

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,[43] 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 for sustainable fisheries, water quality, vital habitats, climate change, toxic contaminants, and other areas.

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.[44] The TMDL satisfies a requirement of the Clean Water Act and EPA commitments under court-approved consent decrees for Virginia and Washington, D.C. dating to the late 1990s.[45] 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.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, EPA is requesting $7.3 million for support

[43] The Chesapeake Bay Watershed Agreement (2014) available at: http://www.chesapeakebay.net/documents/FINAL_Ches_Bay_Watershed_Agreement.withsignatures-HIres.pdf.
[44] 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: http://www.epa.gov/reg3wapd/tmdl/ChesapeakeBay/EnsuringResults.html.
[45] The Chesapeake Bay TMDL, available at: http://www.epa.gov/chesapeakebaytmdl/.

of state and local collection of water quality monitoring data and coordination of science, research, and modeling. The FY 2021 request would support the following activities:

- Water quality monitoring ($5.2 million). This funding would leverage between $10 and $12 million in combined federal, state, and local funds.
    - Tidal and non-tidal monitoring ($4.8 million).
    - Submerged Aquatic Vegetation (SAV) monitoring ($400 thousand).

- Help build capacity at the state level ($2.1 million).
    - Coordinate modeling, decision support services, data collection, analysis, storage, and access;
    - Support information dissemination and transparency; and
    - Provide consistency and efficiency in communications and data management.

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, is using this information to demonstrate progress toward meeting water quality standards and the Bay TMDL.

At the end of FY 2019, practices were in place to achieve 77 percent of the phosphorus reductions and 39 percent of the nitrogen reductions necessary to attain applicable water quality standards as measured through the Partnership's Phase 6 Chesapeake Bay Watershed Model.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$720.0) This change is a decrease due to the recalculation of base payroll costs.

- (-$76,980.0 / -38.2 FTE) This program change reduces funding for the Chesapeake Bay Program. Remaining resources will support critical activities in water quality monitoring.

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, 2020, Pub. L. 116-94.

Geographic Program: Gulf of Mexico
Program Area: Geographic Programs
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$17,690.4***	***$17,553.0***	***$0.0***	***-$17,553.0***
Total Budget Authority	$17,690.4	$17,553.0	$0.0	-$17,553.0
Total Workyears	12.6	14.7	0.0	-14.7

Program Project Description:

The efforts of EPA's Gulf of Mexico Program Office (GMPO) are dedicated to the protection, restoration and enhancement of the water bodies and coastal environments associated with the greater Gulf of Mexico region.

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021. EPA will encourage the five Gulf of Mexico states to continue to make progress in restoring the Gulf of Mexico from within core water programs.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$17,553.0 / -14.7 FTE) This funding change proposes to eliminate the Gulf of Mexico Program. This change returns the responsibility for funding local environmental efforts and programs to state and local entities.

Statutory Authority:

Clean Water Act. Further Consolidated Appropriations Act, 2020, Pub. L. 116-94.

Geographic Program: Lake Champlain

Program Area: Geographic Programs
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$10,995.0***	***$13,390.0***	***$0.0***	***-$13,390.0***
Total Budget Authority	$10,995.0	$13,390.0	$0.0	-$13,390.0

Program Project Description:

EPA supports efforts to protect Lake Champlain through partnerships to implement the "Opportunities for Action" management plan. The plan was developed to bring together people with diverse interests in the lake to create a comprehensive pollution prevention, control, and restoration plan for protecting the future of the Lake Champlain Basin.

FY 2021 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2021. EPA will encourage New York and Vermont to continue to make progress in restoring Lake Champlain from within core water programs.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$13,390.0) This funding change proposes to eliminate the Lake Champlain Program. This change returns the responsibility for funding local environmental efforts and programs to state and local entities.

Statutory Authority:

Boundary Waters Treaty of 1909; Clean Water Act; Further Consolidated Appropriations Act, 2020, Pub. L. 116-94.

Geographic Program: Long Island Sound

Program Area: Geographic Programs
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$14,232.7***	***$21,000.0***	***$0.0***	***-$21,000.0***
Total Budget Authority	$14,232.7	$21,000.0	$0.0	-$21,000.0

Program Project Description:

EPA and the States of Connecticut and New York work in partnership to restore and protect Long Island Sound. EPA assists states in implementing the Long Island Sound's Comprehensive Conservation and Management Plan by coordinating the cleanup and restoration actions of the Long Island Sound Study Management Conference.

FY 2021 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2021. EPA will encourage Long Island Sound states and local entities to continue to make progress in restoring the Sound from within core water programs.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$21,000.0) This funding change proposes to eliminate the Long Island Sound Program. This change returns the responsibility for funding local environmental efforts and programs to state and local entities.

Statutory Authority:

Clean Water Act § 119.

Geographic Program: Other

Program Area: Geographic Programs
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$7,191.3***	***$9,566.0***	***$0.0***	***-$9,566.0***
Total Budget Authority	$7,191.3	$9,566.0	$0.0	-$9,566.0
Total Workyears	4.7	4.7	0.0	-4.7

Program Project Description:

Under this program, the Agency develops and implements approaches to mitigate pollution for specific and targeted geographic areas, including the Northwest Forest Program, Lake Pontchartrain Basin Restoration Program, and the Southeast New England Coastal Watershed Restoration Program.

Northwest Forest Program

The Northwest Forest Program supports interagency and intergovernmental efforts that coordinate and leverage resources for water quality and drinking water efforts in seven[46] western states.

Lake Pontchartrain Basin Restoration Program

The Lake Pontchartrain Basin Restoration Program, through a collaborative and voluntary effort, strives to restore ecological health by developing and funding restoration projects within the sixteen parishes in the basin.

Southeast New England Coastal Watershed Restoration Program (SNECWRP)

The Southeast New England Program serves as a hub to enable protection and restoration of the coastal watersheds of Southeast New England, including the ecosystem services that sustain the region's communities.

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021. EPA will encourage states and local entities to continue to make progress in restoring these major aquatic ecosystems from within core water programs.

[46] California, Idaho, Montana, Nevada, Oregon, Utah, and Washington.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$9,566.0 / -4.7 FTE) This funding change proposes to eliminate the Geographic Program: Other. This change returns the responsibility for funding local environmental efforts and programs to state and local entities.

Statutory Authority:

Clean Water Act.

Geographic Program: South Florida
Program Area: Geographic Programs
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$1,305.2***	***$4,845.0***	***$3,206.0***	***-$1,639.0***
Total Budget Authority	$1,305.2	$4,845.0	$3,206.0	-$1,639.0
Total Workyears	1.3	1.3	1.2	-0.1

Program Project Description:

Rapidly growing South Florida and its nearly 10 million residents represent a multibillion-dollar economy fueled by outdoor recreational tourism (beaches, fishing, boating and diving); commercial fishing; waterfront real estate development; and agriculture that depend on clean oceans, estuaries, rivers, lakes and drinking water. EPA is committed to protecting and restoring the Everglades, Florida Keys National Marine Sanctuary (FKNMS), Biscayne Bay and the other extraordinary natural ecosystems 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, including the Clean Water Act Section 404 Wetlands Program, the Everglades Water Quality Restoration Strategies Program, the Everglades 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, the Brownfields Program, and other programs.[47]

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. The South Florida Program supports efforts to protect and restore various communities and ecosystems impacted by environmental problems. EPA's request includes appropriate workforce support levels. In FY 2021, EPA will focus on the activities listed below.

- Implementation of the FKNMS Water Quality Protection Program long-term status and trends monitoring projects (water quality, coral reef, and seagrass) and the web-enabled

[47] http://www.epa.gov/aboutepa/about-epa-region-4-southeast.

data management program.[48] The monitoring programs have generated an impressive amount of data on the condition of the Florida Keys National Marine Sanctuary's water quality, seagrass and coral/benthic habitat communities. Data generated from these programs have documented periodic oceanographic events such as algal blooms, seagrass die-offs, and coral diseases, and provided the foundational data for the development of nutrient numeric criteria. Data from these long-term data sets informs resource managers' understanding of the living marine resources within the Florida Keys National Marine Sanctuary. 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 20+ reef building corals species of the Florida Reef Tract. To date, the South Florida program has provided more than $1.5 million to support coral research to hinder or halt the disease destroying corals reefs vital to Florida's eco-tourism industry and that serve as a natural mitigation barrier from storms and hurricanes.

- Support of the Everglades Regional Environmental Monitoring and Assessment Program (REMAP). REMAP is an extensive assessment of the Everglades' health conducted by EPA Region 4 since 1993 that measures current and changing conditions for water quality and ecological resources. Data is used by federal and state agencies, tribes, agriculture, the public, non-governmental organizations and the National Academies of Sciences to understand whether conditions are getting better or worse and to assess restoration progress. The data also helps to explain the effectiveness of control programs for phosphorus and mercury. The 2014 sampling of 119 Everglades locations represented the tenth sampling event over the last 20 years. The final assessment report for the 2014 sampling event will be completed in FY 2020. This report will address key questions related to water management and soil loss, track the effectiveness of restoration efforts such as the Restoration Strategies Program to control phosphorus, efforts to restore Everglades' habitat, and efforts to control mercury so fish consumption advisories to protect human health are no longer necessary.

- Continuation of EPA's National Environmental Policy Act and water quality coordination with the Jacksonville U.S. Army Corps of Engineers District and South Florida Water Management District for the ongoing planning and implementation activities associated with Comprehensive Everglades Restoration Plan[49] (CERP) implementation. CERP is the largest ecosystem restoration effort in the world.

- Continued implementation of the Florida Keys Wastewater and Stormwater 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. In 2019, greater than 90 percent of Florida Keys homes and business are on advanced wastewater treatment systems and more than 30,000 septic tanks have been eliminated.

[48] Florida Keys National Marine Sanctuary Water Quality Protection Program. http://ocean.floridamarine.org/fknms_wqpp/pages/wqpp.html/.
[49] For more information: http://www.evergladesrestoration.gov/.

- Restoration of residential canals in the Florida Keys. Of the 502 canals evaluated, 131 exhibited poor water quality. Local governments are implementing the Monroe County Canal Management Master Plan developed with funds through the South Florida Geographic Initiative. Local governments have leveraged $7.1 million to implement weed barriers, organic removal, culvert installation, backfilling, and pumping technologies at eight canal demonstration pilot sites to improve water quality and habitat.[50] Monroe County is seeking alternative technologies to restore canals. In April 2019, the Governor of Florida announced that the state Department of Economic Opportunity will launch a Canal Restoration Work Program to establish a definitive timeline and milestones for canal restoration.

- Support of studies related to phosphorus enrichment and chlorophyll increases resulting in dying seagrass beds and increasing macro algae blooms in North Biscayne Bay. EPA specifically will fund the development of a sediment and water quality model for the Bay; expand the State's ecological and water monitoring network; and provide for a strategic outreach campaign to implement best management practices to address land-based sources of pollution.

- Enhancement of water quality and seagrass monitoring in the Caloosahatchee Estuary that has been heavily impacted by harmful algal blooms in recent years. EPA funding will be leveraged with a $1 million grant from Florida to support the restoration of seagrass habitat in the upper Caloosahatchee River.

- Support of CWA Section 404 implementation, including wetlands conservation, permitting, dredge and fill and mitigation banking strategies with U.S. Army Corps of Engineers.

- Continuation of collaborative efforts through interagency workgroups including: South Florida Ecosystem Restoration Task Force and Working Group; Florida Bay Program Management Committee; and Florida Keys National Marine Sanctuary Water Quality Protection Program Steering Committee.

- Continuation of work with the State of Florida on Everglades Water Quality Restoration Strategies to address phosphorus 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 2021 Annual Performance Plan does not include annual performance goals specific to this program.

[50] For more information: http://www.monroecounty-fl.gov/index.aspx?NID=598.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$1,639.0 / -0.1 FTE) This program change reduces funding for the South Florida Geographic Program by building on program efficiencies and emphasizing core work.

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.

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$8,381.7***	***$5,922.0***	***$0.0***	***-$5,922.0***
Total Budget Authority	$8,381.7	$5,922.0	$0.0	-$5,922.0
Total Workyears	1.8	1.8	0.0	-1.8

Program Project Description:

EPA collaborates with agencies and non-governmental organizations to implement the seven-point *Bay Delta Action Plan* (2012)[51] designed to protect and restore water quality, aquatic life, and ecosystem processes in the San Francisco Bay/Sacramento-San Joaquin Delta. EPA assists the State Water Resources Control Board with the comprehensive update of the Bay Delta Water Quality Control Plan.[52]

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021. EPA will encourage the State of California and local entities to continue to make progress in restoring the San Francisco Bay from within core water programs.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$5,922.0 / -1.8 FTE) This funding change proposes to eliminate the San Francisco Bay Program. This change returns the responsibility for funding local environmental efforts and programs to state and local entities.

Statutory Authority:

Clean Water Act. Further Consolidated Appropriations Act, 2020, Pub. L. 116-94.

[51] EPA Bay Delta Action Plan (2012), found at: http://www2.epa.gov/sfbay-delta/bay-delta-action-plan.
[52] State Water Board Bay Delta Water Quality Control Plan (webpage updated in 2018), found at: http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/.

Geographic Program: Puget Sound

Program Area: Geographic Programs
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$27,936.8***	***$33,000.0***	***$0.0***	***-$33,000.0***
Total Budget Authority	$27,936.8	$33,000.0	$0.0	-$33,000.0
Total Workyears	5.0	5.7	0.0	-5.7

Program Project Description:

The Puget Sound Program works with partners to implement the Puget Sound Action Agenda, the long-term plan for Puget Sound basin protection and restoration. In addition, the Puget Sound Program funds assistance agreements with the federally recognized tribes in Puget Sound, tribal consortia, and the North West Indian Fisheries Commission.

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021. EPA will encourage state, tribal, and local entities to continue to make progress in restoring the Puget Sound from within core water programs.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$33,000.0 / -5.7 FTE) This funding change proposes to eliminate the Puget Sound Program. This change returns the responsibility for funding local environmental efforts and programs to state and local entities.

Statutory Authority:

Clean Water Act. Further Consolidated Appropriations Act, 2020, Pub. L. 116-94.

Great Lakes Restoration
Program Area: Geographic Programs
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$292,571.0***	***$320,000.0***	***$320,000.0***	***$0.0***
Total Budget Authority	$292,571.0	$320,000.0	$320,000.0	$0.0
Total Workyears	63.9	68.5	68.5	0.0

Program Project Description:

The Great Lakes are the largest system of surface freshwater on Earth, containing 20 percent of the world's surface freshwater and 95 percent of the United States' surface freshwater. The watershed includes two nations, eight U.S. states, two Canadian provinces, and 35 tribes.

Through a coordinated interagency process led by the Environmental Protection Agency (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 30 million Americans and restores the economic health of the region. This interagency collaboration accelerates progress, avoids potential duplication of effort, and saves money. In accordance with the Clean Water Act, EPA and its partners are accomplishing this restoration through the implementation of five-year GLRI Action Plans. Implementation of GLRI Action Plan III, covering FYs 2020 through 2024, began in October 2019.

EPA and its partners have achieved significant results since the GLRI started in 2010, including:

- Three Areas of Concern (AOCs) delisted and eight others that have had the cleanup restoration actions necessary for delisting completed (prior to GLRI, only one Great Lakes AOC was delisted);
- 75 Beneficial Use Impairments (BUIs), at 24 AOCs in the eight Great Lakes states, have been removed, more than seven times the total number of BUIs removed in the preceding 22 years;
- Over 4,000,000 cubic yards of contaminated sediment have been remediated;
- 153,000 acres of invasive species control activities implemented;
- Approximately 8,500,000 pounds of Asian Carp have been removed from the Illinois River, reducing the potential for Asian Carp to invade the Great Lakes;
- Loadings of over 1,100,000 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 370,000 acres of habitat have been protected, restored, or enhanced; and

- About 3,700 educators and educational institutions were given hands-on training in Great Lakes based education and stewardship – benefiting hundreds of thousands of students annually.

Under the GLRI, funds are first appropriated to EPA. After annual evaluation and prioritization consistent with the GLRI Action Plan, EPA then provides a substantial portion of those funds to its partner federal agencies. Agencies undertake projects themselves, and also 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. In an effort to conserve GLRI dollars and encourage significant local involvement in and support for GLRI-funded projects, any GLRI grant issued directly by EPA from the FY 2021 appropriation will require that the grant recipient provide a "cost-share" amount, including in-kind work, constituting at least 10 percent of the cost of the project being funded by the grant. For example, if the expected total cost of the project to be funded by the EPA grant is $500,000.00, the grant recipient must contribute at least $50,000.00 to the project. This cost-share requirement can be waived in the event of demonstrated financial hardship on the part of the grant recipient.

EPA's Great Lakes National Program Office (GLNPO) was assigned oversight of the Great Lakes and Lake Champlain Invasive Species Program at the end of calendar year 2018 as a result of passage of the Vessel Incidental Discharge Act of 2018. To fulfill this statutory mandate, EPA is collaborating with the U.S. Fish and Wildlife Service (USFWS), U.S. Geological Survey (USGS), National Oceanic and Atmospheric Administration (NOAA), and the United States Coast Guard, and will collaborate with other applicable federal, state, local, and tribal agencies.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, 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; 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, USFWS, U.S. Army Corps of Engineers (USACE), USGS, 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 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 2021 targets are:
    - Two AOCs (18 AOCs cumulative since 1987) where all management actions necessary for delisting have been implemented;
    - Eight BUIs (101 BUIs cumulative since 1987) removed in AOCs; and

- Two AOCs (24 AOCs cumulative since 1987 – more than 75 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 vulnerable populations that consume Great Lakes fish. Additional emphasis will be placed on the safe consumption of wildlife and harvested plant resources.

- **Increase knowledge about 1) "Chemicals of Mutual Concern" identified pursuant to the Great Lakes Water Quality Agreement Annex 3; and 2) 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 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 Asian 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. FY 2021 target: Eight rapid responses or exercises conducted.

- **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, 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. FY 2021 target: Invasive species control on 6,000 acres (171,000 acres cumulative since 2010).

- **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, Dreissenid 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 (*i.e.*, 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 Genessee 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. FY 2021 targets:
    - Reduce 300,000 pounds (1,900,000 pounds cumulative since 2010) of phosphorus from conservation practice implementation throughout Great Lakes watersheds; and
    - 170,000 acres (2,370,000 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. FY 2021 targets:
    - 50,000,000 gallons (400,000,000 gallons cumulative since 2015) of untreated stormwater runoff captured or treated; and
    - Seven miles (40 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 will 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. FY 2021 targets:

• 30 nutrient monitoring and assessment activities conducted; and
• Ten nutrient or stormwater runoff reduction practices or tools developed or evaluated.

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 in order 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:
  • 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.

  FY 2021 targets:
  • 12,000 acres (406,000 acres cumulative since 2010) of coastal wetland, nearshore, and other habitats restored, protected, or enhanced.
  • 200 miles (5,900 miles cumulative since 2010) of connectivity for aquatic species.

Increase resiliency of species through comprehensive approaches that complement on-the-ground 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 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.

FY 2021 target: One species (two species cumulative since 2018) benefited where actions have been completed to significantly protect or promote recovery of populations.

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 K-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: contaminants in Great Lakes fish, water quality and the lower food web in the offshore waters, and nutrient and harmful algal blooms in priority areas. 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 by which funding allocations are determined for programs and projects of GLRI agencies. Under Clean Water Act 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 GLRI and amounts transferred to participating Federal departments and agencies.
GLRI Funding Allocations. EPA leads the cooperative process by which funding allocations are determined for programs and projects of GLRI agencies.

Summary of FY 2014 - 2021 Allocations by Focus Area

Focus Area Allocations (Dollars in Thousands)								
Focus Area	**FY 2014**	**FY 2015**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**[a]
Toxic Substances and AOC	$105,000	$120,200	$106,600	$107,500	$107,500	$107,500	$107,500	$107,500
Invasive Species	$54,600	$53,600	$56,400	$62,200	$56,900	$56,900	$56,900	$56,900
Nonpoint Source Pollution Impacts on Nearshore Health[b]	$59,300	$51,000	$51,700	$47,900	$51,000	$51,700	$51,700	$50,900
Habitat and Species[d]	$60,600	$49,000	$54,200	$49,500	$50,000	$50,200	$50,200	$49,400
Foundations for Future Restoration Actions[ed]	$20,500	$26,200	$31,100	$32,900	$34,600	$33,700	$33,700	$35,300
To be allocated [e]							$20,000	$20,000
TOTAL	$300,000	$300,000	$300,000	$300,000	$300,000	$300,000	$320,000	$320,000

[a] Based on allocations approved by the Regional Working Group.

[b] Nearshore Health and Nonpoint Source Pollution in FY 2010-2014.

[c] Habitat and Wildlife Protection and Restoration in FY 2010-2014.

[d] Accountability, Education, Monitoring, Evaluation, Communication, and Partnerships in FY 2010 – 2014.

[e] The Regional Working group has not determined allocations for additional funding provided in FY 2020 and requested for FY 2021.

Summary of FY 2014 - 2021 Allocations* by Agency

(Dollars in Thousands)

Agency	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
DHS-USCG	$1,278	$2,006	$1,274	$1,580	$500	$1,661	$1,250	$1,300
DOC-NOAA	$35,170	$24,818	$30,740	$12,027	$24,629	$16,967	$9,939	$7,343
DOD-USACE	$28,655	$48,389	$33,369	$55,940	$43,559	$60,336	$11,795	$11,555
DOI-BIA	$3,950	$4,750	$6,203	$10,904	$11,617	$9,842	$15,000	$15,000
DOI-NPS	$3,177	$3,142	$3,799	$4,379	$3,940	$3,822	$3,831	$3,947
DOI-USFWS	$49,038	$41,393	$48,118	$41,794	$52,902	$45,897	$32,247	$32,065
DOI-USGS	$19,832	$23,433	$22,960	$26,817	$25,724	$21,603	$7,653	$7,640
DOT-FHWA	$965	$0	$0	$0	$0	$0	$0	$0
DOT-MARAD	$1,791	$1,291	$2,106	$800	$675	$803	$1,000	$750
HHS-ATSDR/CDC	$1,739	$1,738	$1,692	$593	$590	$605	$605	$605
USDA-APHIS	$1,246	$1,246	$1,089	$1,262	$1,176	$1,312	$1,378	$1,378
USDA-NRCS	$24,280	$23,281	$19,062	$22,072	$25,096	$20,697	$22,239	$22,374
USDA-USFS	$6,401	$6,290	$10,822	$11,355	$10,153	$11,646	$9,931	$9,894
Multi-agency	$0	$0	$0	$0	$0	$0	$58,552	$67,379
IA Totals:	$177,521	$181,776	$181,234	$189,522	$200,560	$195,191	$175,420	$181,231
EPA and Misc IAs	$122,479	$118,224	$118,766	$110,478	$99,440	$104,809	$124,580	$118,769
To be allocated							$20,000	$20,000
Totals:	$300,000	$300,000	$300,000	$300,000	$300,000	$300,000	$320,000	$320,000

* Final allocations for FY 2014 – FY 2017. Allocations for FY 2018 and FY 2019 are as reported in the October 2019 GLRI Financial Management Updates. Allocations for FY 2020 and FY 2021 are based on budgets approved by GLRI Regional Working Group agencies and the current allocation does not include the additional funding received in FY 2020 and requested for FY 2021.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- There is no change in program funding.

Statutory Authority:

Clean Water Act Section 118.

Homeland Security

Homeland Security: Communication and Information

Program Area: Homeland Security
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$4,003.8***	***$3,818.0***	***$3,677.0***	***-$141.0***
Total Budget Authority	$4,003.8	$3,818.0	$3,677.0	-$141.0
Total Workyears	11.2	11.3	11.3	0.0

Program Project Description:

This program supports EPA's coordination and communication activities related to national security and homeland security. The White House, Congress, and the Department of Homeland Security (DHS) have defined responsibilities for EPA in several areas, including critical water infrastructure protection and response to chemical, biological, radiological, and nuclear events, through a series of statutes, presidential directives, and national plans. The EPA's Office of Homeland Security (OHS) provides technical, policy, and intelligence advice to senior agency leadership related to National and Homeland Security. OHS also leads and coordinates EPA's engagement with the White House, National Security Council, and other federal departments and agencies on the development of new homeland security policy and requirements. As the EPA Federal Intelligence Coordination Office, OHS coordinates analytical intelligence support capacity across the Agency to meet EPA requirements and EPA whole-of-government obligations.

OHS focuses on coordination and integration of chemical, biological, and radiological preparedness and response programs as they relate to 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. In addition, OHS works closely with the Water Program to coordinate and integrate water security efforts internally and externally with stakeholders regarding physical threats and contamination and cyber threats to operations. 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 EPA Insider Threat, Suspicious Activity Reporting, Operational Security, Counterintelligence, and Committee on Foreign Investment in the U.S. Programs.

In addition, this program utilizes several mechanisms to support its ability to implement EPA's broad range of homeland security responsibilities, ensure consistent development and implementation of homeland security policies and procedures, avoid duplication, and build a network of partnerships. OHS provides leadership to ensure coordination and integration of EPA's homeland security programs engaged in prevention, protection, mitigation, response, and recovery efforts under the National Preparedness System. OHS regularly convenes meetings of the

Homeland Security Executive Steering Committee, composed of senior executives from EPA programs and regional offices; the Homeland Security Collaborative Network, a cross-agency leadership group, to discuss emerging threats, policies, and intelligence related to national and homeland security; and the Regional Homeland Security Coordinators to ensure regional homeland and national security needs are being addressed.

Homeland security information technology efforts are closely coordinated with the agency-wide information security and infrastructure activities, which are managed in the Information Security and Information Technology (IT)/Data Management programs. These IT support programs also enable contact among localities, EPA program and regional offices, and laboratories in emergency situations.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness, in the *FY 2018 - 2022 EPA Strategic Plan*.

In FY 2021, OHS will:

- Promote a coordinated approach to EPA's homeland security activities and support the alignment of resources with government-wide homeland security priorities and requirements.

- 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 Domestic Resilience Group, chaired by the National Security Council, and in weekly meetings for other national homeland 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 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 Information*[53] 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/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.

EPA's FY 2021 resources support national cybersecurity efforts through monitoring across the Agency's IT infrastructure to detect, remediate, and eradicate malicious activity/software from EPA's computer and data networks. EPA will continue to enhance internal Computer Security Incident Response Capability to ensure rapid identification and reporting of suspicious activity and will increase training and awareness of cybersecurity threats. 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.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$299.0) This change is an increase due to the recalculation of base payroll costs.

- (-$102.0) This program change streamlines activities related to communication, policies, and procedures to support and coordinate homeland security efforts across the Agency.

- (-$338.0) This program change refocuses IT efforts coordinating homeland security across the Agency. The Agency will refocus on core functions that improve foundational capabilities and close gaps in IT security architecture.

[53] For more information, please see: https://obamawhitehouse.archives.gov/the-press-office/2011/10/07/executive-order-13587-structural-reforms-improve-security-classified-net.

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; Food Safety Modernization Act § 208.

Homeland Security: Critical Infrastructure Protection

Program Area: Homeland Security
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$444.4***	***$840.0***	***$1,361.0***	***$521.0***
Science & Technology	$7,957.5	$9,053.0	$7,732.0	-$1,321.0
Total Budget Authority	$8,401.9	$9,893.0	$9,093.0	-$800.0
Total Workyears	19.4	22.6	21.0	-1.6

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 2021 Activities and Performance Plan:

Work in this program supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018-2022 EPA Strategic Plan.* In FY 2021, EPA will build the capacity 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, access to a comprehensive range of important materials, including the most updated information, tools, training, and protocols designed to enhance the security, preparedness, and resiliency of the water sector.

- Ensuring that water utilities receive timely and informative alerts about changes in the homeland security advisory level or about 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, needs to alert the utilities of the increasing multiple occurrences or "trends" of these incidents.

Effective information sharing protocols allow the water sector to improve its understanding of the latest water security and resiliency protocols and threats. They also reduce risk by enhancing the water sector's ability to prepare for an emergency.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$118.0) This change is an increase due to the recalculation of base payroll costs.

- (+$403.0 / +2.2 FTE) This program change is an increase to carry out EPA's mission as the Sector-Specific Agency for drinking water and wastewater infrastructure security. Funding is critical to protect water infrastructure from natural disasters and terrorist threats.

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: Greater Certainty, Compliance, and Effectiveness
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$5,755.6***	***$5,355.0***	***$4,986.0***	***-$369.0***
Science & Technology	$410.0	$443.0	$500.0	$57.0
Building and Facilities	$4,259.1	$6,676.0	$6,176.0	-$500.0
Hazardous Substance Superfund	$979.3	$1,017.0	$915.0	-$102.0
Total Budget Authority	$11,404.0	$13,491.0	$12,577.0	-$914.0
Total Workyears	8.8	9.2	9.2	0.0

Total workyears in FY 2021 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 federally mandated Personal Identity Verification (PIV) program, which adheres to the requirements as set forth in Homeland Security Presidential Directive-12 (HSPD-12).[54] 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 initiates and adjudicates personnel background investigations, processes fingerprint checks, determines individual eligibility to access classified National Security Information (NSI), and maintains personnel security records for all federal and non-federal employees.

The NSI Program manages and safeguards EPA's classified information for its federal workforce and contractors. The Program ensures federal mandates are followed to protect NSI, conduct federally mandated training, and conduct NSI inspections.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. As part of the nationwide protection of buildings and critical infrastructure, EPA performs vulnerability assessments on facilities each

[54] For additional information, please refer to: https://www.dhs.gov/homeland-security-presidential-directive-12.

year. Through this program, the Agency also 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 2021, EPA will continue to partner with GSA on the Enterprise Physical Access Control System (ePACS), which was deployed in FY 2019. 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. ePACS 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. In addition, the Agency will continue to utilize GSA's Managed Service Office, *USAccess*, for PIV card enrollment and issuance. *USAccess* is a shared services solution which is in line with OMB's Federal IT Shared Services Strategy and the President's Management Agenda.[55]

EPA is in compliance with 5 CFR 1400, which requires that federal and non-federal positions are re-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 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$369.0) This program change reduces funding for physical security and preparedness infrastructure. The Agency will focus on performing the highest priority annual facility assessments.

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).

[55] For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2018/03/Presidents-Management-Agenda.pdf.

Indoor Air and Radiation

Indoor Air: Radon Program
Program Area: Indoor Air and Radiation
Goal: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$2,642.6***	***$3,136.0***	***$0.0***	***-$3,136.0***
Science & Technology	$16.7	$143.0	$0.0	-$143.0
Total Budget Authority	$2,659.3	$3,279.0	$0.0	-$3,279.0
Total Workyears	9.1	9.0	0.0	-9.0

Program Project Description:

Title III of the Toxic Substances Control Act (TSCA) authorizes EPA to undertake a variety of activities 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, and advises the public of steps they can take to reduce exposure. For over 30 years, EPA's radon program has provided important guidance and significant funding to help states establish their own programs.

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$3,136.0 / -9.0 FTE) This funding change proposes to eliminate the Indoor Air: Radon Program in the EPM account.

Statutory Authority:

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

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$10,880.5***	***$7,992.0***	***$2,470.0***	***-$5,522.0***
Science & Technology	$2,794.7	$1,781.0	$1,047.0	-$734.0
Hazardous Substance Superfund	$1,768.6	$1,985.0	$2,122.0	$137.0
Total Budget Authority	$15,443.8	$11,758.0	$5,639.0	-$6,119.0
Total Workyears	57.4	53.8	25.0	-28.8

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. This includes the Atomic Energy Act; Clean Air Act; Comprehensive Environmental Response, Compensation and Liability Act; Energy Policy Act; Nuclear Waste Policy Act; Public Health Service Act; Safe Drinking Water Act; Uranium Mill Tailings Radiation Control Act; Waste Isolation Pilot Plant Land Withdrawal Act; Marine Protection, Research, and Sanctuaries Act; and Clean Water Act.

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 at the Department of Energy's (DOE) Waste Isolation Pilot Plant (WIPP);56 the regulation of airborne radioactive emissions; and the development and determination of appropriate methods to measure radioactive releases and exposures under Section 112 of the Clean Air Act.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018–2022 EPA Strategic Plan*. EPA will meet its statutory obligation to implement its regulatory oversight responsibilities for DOE activities at the Waste Isolation Pilot Plant (WIPP) facility, as mandated by the Congress in the WIPP Land Withdrawal Act of 1992. EPA also will review and update regulation or guidance, as necessary.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

[56] For additional information, please see: http://www.epa.gov/radiation/wipp/background.html.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$172.0) This change is an increase due to the recalculation of base payroll costs.

- (-$5,694.0 / -24.6 FTE) This program change reduces support to activities in the Radiation: Protection Program to focus agency resources on priority activities, including implementation of waste disposal standards at the WIPP.

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.

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$2,078.1***	***$2,196.0***	***$2,350.0***	***$154.0***
Science & Technology	$2,545.0	$3,089.0	$4,167.0	$1,078.0
Total Budget Authority	$4,623.1	$5,285.0	$6,517.0	$1,232.0
Total Workyears	26.3	33.3	31.5	-1.8

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 Federal Radiological Preparedness Coordinating Committee (FRPCC) and the Federal Advisory Team for Environment, Food and Health (the "A-Team"). 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018–2022 EPA Strategic Plan*. In FY 2021, EPA will continue to evaluate its resources and streamline activities across radiological emergency response activities and assets to focus on essential preparedness work. 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 the RERT's ability to fulfill EPA's responsibilities.

Evaluation of Response Plans

In FY 2021, EPA will continue to work with interagency partners under the FRPCC to revise federal radiation emergency response plans and develop radiological emergency response protocols and standards as resources dictate. The Agency will continue to implement the Protective Action Guidance[57] and use guidance addressing lessons learned from incidents and

[57] 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.

exercises to ensure the effective delivery of EPA support in coordination with other federal and state response agencies.

Coordinating Preparedness Efforts

EPA will continue essential planning and participation in interagency table-top and field exercises, including radiological anti-terrorism activities with the Nuclear Regulatory Commission (NRC), the Department of Energy (DOE), the Department of Defense (DoD), and the Department of Homeland Security (DHS). The Agency also will provide technical support on priority issues to federal and state radiation, emergency management, solid waste and health programs responsible for radiological emergency response and preparedness programs.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$359.0) This change is an increase due to the recalculation of base payroll costs.

- (-$205.0 / -1.1 FTE) This program change decreases technical support for stakeholders that are responsible for radiological emergency response.

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: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$10,931.6***	***$11,627.0***	***$0.0***	***-$11,627.0***
Science & Technology	$216.7	$136.0	$0.0	-$136.0
Total Budget Authority	$11,148.3	$11,763.0	$0.0	-$11,763.0
Total Workyears	34.7	37.2	0.0	-37.2

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. EPA utilizes a range of strategies, including partnerships with non-governmental, professional, federal, state and local organizations, to educate and prepare individuals, school districts, industry, the health care community, and others to take action to reduce health risks from poor indoor air quality in homes, schools, and other buildings.

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$11,627.0 / -35.8 FTE) This funding change proposes to eliminate the Reduce Risks from Indoor Air Program in the EPM account.

Statutory Authority:

Title III of the Toxic Substances Control Act (TSCA); Clean Air Act; and Title IV of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

Information Exchange

Children and Other Sensitive Populations: Agency Coordination

Program Area: Information Exchange / Outreach
Goal: A Cleaner, Healthier Environment
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$5,903.7***	***$6,173.0***	***$2,704.0***	***-$3,469.0***
Total Budget Authority	$5,903.7	$6,173.0	$2,704.0	-$3,469.0
Total Workyears	17.1	18.4	9.9	-8.5

Program Project Description:

The Program coordinates and advances the protection of children's environmental health across 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. In addition, the work of the Program is directed by EPA's recently reaffirmed *Policy on Evaluating Health Risks to Children*,[58] Executive Order 13045 *Protection of Children's Health from Environmental Health Risks and Safety Risks*, statutory authorities addressing children's environmental health, and other existing guidance.[59] The Program supports the President's Task Force on Environmental Health Risks and Safety Risks to Children, co-chaired by EPA and the U.S. Department of Health and Human Services Deputy Secretary. The Program coordinated the development of the *Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Effects*,[60] which was finalized in December 2018.

In FY 2019, the Program accomplished the following: contributed to the development of 80 regulations, scientific assessments and/or policies including the Lead and Copper Rule under the Safe Drinking Water Act, and additional actions under the Food Quality Protection Act, Clean Water Act, Clean Air Act, and Toxic Substances Control Act, among others; advanced the state of understanding by writing and presenting eleven scientific papers and presentations; and coordinated three in person plenary meetings of the Children's Health Protection Advisory Committee[61] and launched review of charge questions to improve the Agency's risk communication related to the protection of children's environmental health.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in the Marketplace in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, the Program will:

[58] For more information, please refer to: https://www.epa.gov/sites/production/files/2018-10/documents/childrens_health_policy_reaffirmation_memo.10.11.18.pdf.

[59] For more information, please refer to: https://www.epa.gov/children/history-childrens-environmental-health-protection-epa.

[60] For more information, please refer to: https://www.epa.gov/sites/production/files/2018-12/documents/fedactionplan_lead_final.pdf.

[61] For more information, please refer to: https://www.epa.gov/children/childrens-health-protection-advisory-committee-chpac.

- Continue to serve as co-lead for the interagency efforts of the President's Task Force on Environmental Health Risks and Safety Risks to Children alongside the Department of Health and Human Services. This effort will focus on co-chairing the Senior Steering Committee and coordinating cross-federal activities related to topics such as asthma disparities and implementation of the *Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts.* Each of the four goals of the Federal Lead Action Plan has specific objectives and associated activities which are tracked by member agencies of the Task Force.[62] They are as follows: Goal 1: Reduce children's exposure to lead sources; Goal 2: Identify lead-exposed children and improve their health outcomes; Goal 3: Communicate more effectively with stakeholders; and Goal 4: Support and conduct critical research to inform efforts to reduce lead exposures and related health risks. This work supports the FY 2020 – 2021 Agency Priority Goal: Reduce childhood lead exposures and associated health impacts.

- Identify both potential health benefits and/or health risks to children during the development of agency regulations and policies with targeted participation on regulatory workgroups.

- Coordinate in-person plenary meetings of the Children's Health Protection Advisory Committee.

- Support and administer the proposed Healthy Schools Grant Program to provide funding to identify, prevent, reduce, and resolve environmental hazards in public, private not-for-profit, and faith-based pre-primary, primary, and secondary schools, including preventing childhood lead exposure, reducing asthma triggers, promoting integrated pest management, and reducing or eliminating childhood exposure to toxics in schools across all environmental media.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$231.0) This change is an increase due to the recalculation of base payroll costs.

- (-$3,700.0 / -8.5 FTE) This net program change concentrates EPA's efforts on the development of agency regulations and policies with potential health risks to children by streamlining other activities including Pediatric Environmental Health Specialty Units, regionally selected community-based projects addressing local children's environmental health issues, and other children's health efforts.

[62] For more information, please refer to: https://ptfceh.niehs.nih.gov/about/index.htm.

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); Food Quality Protection Act (FQPA).

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$8,597.1***	***$8,580.0***	***$0.0***	***-$8,580.0***
Total Budget Authority	$8,597.1	$8,580.0	$0.0	-$8,580.0
Total Workyears	9.2	9.2	0.0	-9.2

Program Project Description:

The Environmental Education (EE) Program provides guidance and financial support to both rural- and urban-focused grassroots and nonprofit organizations, local educational institutions, universities, community colleges, and state and local environmental agencies. Financial support from EE received by these entities is via the competitive grants process and cooperative agreements. EE also administers the Presidential Environmental Education Awards Program.

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021. EPA will continue to find ways to streamline education activities and leverage funding outside the Agency for environmental stewardship activities via existing cooperative agreements and at the state and local level.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$8,580.0 / -9.2 FTE) This funding change proposes to eliminate the Environmental Education Program.

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.

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$17,090.3***	***$15,184.0***	***$12,328.0***	***-$2,856.0***
Hazardous Substance Superfund	$1,424.8	$1,328.0	$1,293.0	-$35.0
Total Budget Authority	$18,515.1	$16,512.0	$13,621.0	-$2,891.0
Total Workyears	27.8	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 the E-Enterprise business 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)[63] 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.

These shared data services catalog entities routinely referenced by EPA and EN partners, 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.4, Streamline and Modernize in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, EPA will continue to support core functions for the EN information technology (IT) systems, which is in line with the President's Management Agenda for IT modernization and data, accountability, and transparency.[64]

[63] For more information on the Central Data Exchange, please visit: http://www.epa.gov/cdx/.
[64] For additional information, please refer to: https://www.whitehouse.gov/omb/management/pma/.

In FY 2021, the EN Program will continue to be a pivotal component of the E-Enterprise for the Environment strategy that supports business process change agencywide. The E-Enterprise strategy – jointly governed by states, tribes, and EPA – rethinks how government agencies deliver environmental protection. Under this strategy, 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. In FY 2019, the Agency developed an identity management service that eliminated redundant and time-consuming user registrations across environmental programs and partners. As a result, the E-Enterprise Portal transforms the EN to a more open platform of services and makes environmental data reporting, sharing, and analysis faster, simpler, and less expensive.

EPA aims to reduce burden and avoid costs when improving IT. The Agency has provisioned 70 Virtual Exchange Services (VES) or virtual nodes to facilitate large-scale data transactions supporting 19 states and over 88 tribal partners, with another 20 anticipated by the end of FY 2020. The VES electronic signature service supports 62 partner exchanges to date and six more are expected in FY 2020. EPA estimates implementation of these services resulted in cost avoidance of approximately $2.3 million for the 19 partner states, who otherwise would have built and managed exchange services independently. EPA will continue to carry out the baseline support for the adoption and onboarding of VES and associated services for EPA and its partners.

In FY 2021, EPA will continue to maintain the EPA Federal Regulation Finder, a public-facing digital service that was deployed to the E-Enterprise Portal[65] in Q2 of FY 2020. The EPA Federal Regulation Finder integrates multiple shared services into a discovery tool that helps industry and the public to more easily identify potentially applicable regulations. It integrates three catalogs: a substance catalog (Substance Registry Services [SRS]); an Enterprise Vocabulary; and a catalog of federal statutes and regulations (Laws and Regulations Services) to enable a user to search for laws and regulations by substance or keyword. In FY 2021, enhancements to the EPA Federal Regulation Finder may include expanding this tool to allow users to search in the North American Industrial Classification System and establishing additional shared data services, such as zip codes, countries, and counties, so that EPA systems no longer must manage these data, instead relying on the centralized services.

Multiple performance efforts also use exchange services and registries (shared data services) to improve data quality in EPA, state, and tribal program data, and to reduce reporting burden on the regulated community. EPA will continue to promote the adoption of the Tribal Identification (TRIBES) shared service by tracking its use by EPA systems that collect tribal names. In FY 2019, EPA increased the number of EPA systems using TRIBES services by 58 percent, from 12 to 19 systems.

EPA also 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 50,000 users per month; many of these users visit SRS to understand regulatory information about chemicals. SRS also receives between 20,000 and 140,000 web service hits per month (depending on reporting cycles), mostly by EPA systems that have incorporated the web services into their online reporting forms.

[65] For additional information, please refer to: https://www.e-enterprise.gov/workbench.

Priorities for EPA registries include improving registry technologies by moving them into an open-source platform so they are cloud-ready. In FY 2021, EPA will maintain the registries at FY 2020 levels, and selectively move them into open-source platforms. EPA will 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 2021, EPA will continue to work with the Department of Homeland Security's Customs and Border Protection (CBP) to maintain systems that support the importation process of products that are of dual interest to EPA and CBP. EPA will support mission essential activities of EPA and CBP data exchanges in FY 2021. Such electronic reporting will aid enforcement coordinators by automating a currently manual review process and allowing them to focus on key high-value monitoring and targeting activities for noncompliant imports.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$659.0) This change is an increase due to recalculation of base payroll costs.

- (-$3,515.0) This net program change streamlines quality assurance of registries; refocuses modernization efforts; and reduces the collection and exchange of environmental data with states, tribes, and regulated entities.

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
Goal: More Effective Partnerships
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$51,243.2***	***$47,259.0***	***$43,784.0***	***-$3,475.0***
Total Budget Authority	$51,243.2	$47,259.0	$43,784.0	-$3,475.0
Total Workyears	290.5	272.9	235.6	-37.3

Total workyears in FY 2021 include 2.0 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 (OPE).

The Program also supports EPA's Regional Administrators' offices. The Program's management, coordination, and policy activities link the Agency's engagement with outside entities, including: Congress, state and local governments, 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 and rural communities; and supporting press and other communications activities. The Program also supports administrative management services involving correspondence control and records management systems, human resources management, budget formulation and execution, and information technology management services.

In July 2019, EPA completed implementation of centralized FOIA processing, which will provide greater efficiencies, improved responsiveness and transparency consistent with the statute's intent. OEX assumed sole responsibility for and control over the centralized organization, processes and procedures. During FY 2019, OEX closed 731 FOIA requests, nearly as many as FY 2016, FY 2017 and FY 2018 combined. At its height, the backlog of open requests was more than 1,500 with 510 new requests received during the FY. Net backlog at the conclusion of FY 2019 was 1,184 open requests.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in the *FY 2018 - 2022 EPA Strategic Plan*.

In FY 2021, the Program will continue providing management, leadership, and direction to all of EPA's programs and activities and develop the guidance necessary to ensure achievement of the Agency's core statutory responsibilities. In FY 2021, resources of the Program will primarily support critical needs for staff, including travel and workforce support.

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. In FY 2021, OCIR will continue to regularly review and evaluate its processes for responding to congressional and intergovernmental correspondence and 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 FY 2019, OCIR prepared for 12 congressional hearings and responded to 675 congressional and gubernatorial letters. In addition, OCIR is advancing the agencywide metric on increasing the number of grant commitments met. OCIR is comprised of two main components: the Office of Congressional Affairs (OCA) and Office of Intergovernmental Relations (OIR). Interactions with Congress are managed out of the Office of Congressional Affairs. The Office of Intergovernmental Relations 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 2021, OCA will 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. OIR will continue to inform state and local governments of regulatory and other EPA activities. Additionally, OIR will lead the Agency's efforts to support productive working relationships with states through a renewed focus on more effective partnerships.

The Office of Public Affairs (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 and other senior leaders. In FY 2021, 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.

As the central administrative management component of the Administrator's Office (AO), the OAES provides advice, tools, and assistance to the AO's programmatic operations. In FY 2021, OAES will continue to conduct the following activities: human resources management, budget and financial management, information technology and security, and audit management.

In FY 2021, OEX will continue to provide critical administrative support to the Administrator, Deputy Administrator, senior agency officials, and staff to comply with the statutory and regulatory requirements under the Federal Records Act, FOIA, and related statutes and regulations. OEX will continue to manage the AO's correspondence, records management, Privacy Act implementation and FOIA activities. Responsibilities include: processing correspondence for the Administrator and Deputy Administrator, reviewing and preparing documents for their signature, and operating the Correspondence Management System, which provides paperless workflow, tracking and records management capabilities to more than 3,000 EPA employees; managing the Administrator's primary email account; serving as custodian of the Administrator's, Deputy Administrator's, and Immediate Office records and 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. The Office 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.

In FY 2021, OPE 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 in-state 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:

(PM ST1) Percentage of grant commitments achieved by states, tribes, and local communities.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					No Target Established	No Target Established	No Target Established	TBD	Percent
Actual					N/A	N/A			
Numerator									Commit-ments
Denominator									

(PM ST2) Number of alternative shared governance approaches used to address state, tribal, and local community reviews.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					No Target Established	3	20	20	Alternative Approaches
Actual					0	14			

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$2,032.0) This change is an increase due to the recalculation of base payroll costs.

- (-$5,507.0 / -37.3 FTE) This program change reflects EPA's efforts to focus on carrying out the Agency's core mission, our shared responsibilities with states, localities, tribal nations, and regulatory relief.

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
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Create Consistency and Certainty

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$1,906.9***	***$1,824.0***	***$1,983.0***	***$159.0***
Total Budget Authority	$1,906.9	$1,824.0	$1,983.0	$159.0
Total Workyears	6.4	4.6	4.6	0.0

Program Project Description:

The Small Business Ombudsman Program includes the Asbestos and Small Business Ombudsman (ASBO),[66] as well as the Small Business Advocacy Chair and other small business activities located in the Office of Policy's Office of Regulatory Policy and Management.[67] The Program provides a comprehensive suite of resources, networks, tools, and forums for education 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. For example, in FY 2019, ASBO provided a newsletter and worked with state partners to coordinate a comprehensive environmental compliance and education training conference.

The ASBO serves as the Agency's principal advocate for small business regulatory issues through its partnership with EPA Regional Small Business Liaisons, state Small Business Environmental Assistance Programs (SBEAPs)[68] nationwide, the U.S. Small Business Administration Office of Advocacy, and hundreds of small business trade associations. These partnerships provide the information and perspective EPA needs to help small businesses achieve their environmental goals.

Overall, the core functions of the Small Business Ombudsman Program include assisting EPA's program offices with analysis and consideration of the impact of their regulatory actions on small businesses; engaging small entity representatives, and other federal agencies in evaluating the potential impacts of rules; operating and supporting the Program's hotline and homepage; and supporting internal and external small business activities. The Program helps small businesses learn about new actions and developments within EPA and helps the Agency learn about the concerns and needs of small businesses. Based on the Agency's overall small business regulatory and environmental compliance assistance efforts, EPA has earned a grade of "A" in the last 13

[66] For more information, please see: https://www.epa.gov/resources-small-businesses/asbestos-small-business-ombudsman.
[67] For more information, please see: https://www.epa.gov/aboutepa/about-office-policy-op#ORPM.
[68] For more information, please see: https://nationalsbeap.org/.

Small Business Administration (SBA) Office of the National Ombudsman Annual Reports to Congress.[69]

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Create Consistency and Certainty in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, the Program will:

- Improve environmental protection by working with EPA program offices and state SBEAPs to share information and leverage resources, provide compliance assistance resources and enhance the compliance assistance tool box available to the small business community.

- Enhance engagement with state SBEAP partners through a new, expanded cooperative agreement, which supports collaboration on a national level with state SBEAPs and EPA. This upcoming ASBO funded cooperative agreement will support the expansion of the SBEAP website (www.nationalsbeap.org) and other SBEAP communication tools, including a new compliance assistance web-resource, dedicated to non-English speaking small businesses. Additionally, this cooperative agreement will allow for financial support to fund a state SBEAP in hosting and managing the National SBEAP annual training event. This annual event is an important collaboration and face-to-face opportunity for EPA and state SBEAP programs to listen to and support one another in their mission to assist small business regulatory compliance assistance.

- Institute an updated monitoring method for the state SBEAP programs throughout the country. In the past ASBO has requested each state SBEAP complete an annual reporting form, which collected small business assistance and budget data, including common outputs and outcomes for program success, from all state programs. A new, less burdensome data collection (beta) process will be established to help monitor and periodically report on the effectiveness of state SBEAPs in assisting small businesses on environmental regulatory compliance.

- Explore options for reinvigorating and formalizing the collaboration of regional EPA contacts to engage in localized small business program developments, regulatory updates, training support and compliance assistance under the ASBO Program.

- Expand communication and outreach to ASBO's stakeholders with a newly developed ASBO resource guide and updated online communication resources. These new or updated communication tools will target internal EPA customers, which require assistance in considering small business impacts in the rule development process. The tools also will target external customers, such as national trade associations, state SBEAPs and the general small business community. This will help clarify the services that the program provides to support small entity environmental compliance.

[69] For more information, please see: https://www.sba.gov/sites/default/files/2019-04/SBA_ombudsman_Annual_Report_to_Congress_2017.PDF.

- Strengthen the Agency's collaboration to listen to and follow up on small business industry issues, as defined by small business trade associations, during the annual EPA Deputy Administrator Small Business Meeting. This meeting is typically organized and hosted by ASBO for the Deputy Administrator. ASBO plans to survey participants for this meeting (along with other ASBO hosted events) to better meet the needs and improve meeting outcomes for small entity engagement.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$72.0) This change is an increase due to the recalculation of base payroll costs.

- (+$87.0) This program change is a slight increase to maintain communication with small businesses about new actions and developments within EPA.

Statutory Authority:

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; 15 U.S.C. §§ 2641-2656.

Small Minority Business Assistance
Program Area: Information Exchange / Outreach
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Create Consistency and Certainty

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$1,411.3***	***$987.0***	***$1,080.0***	***$93.0***
Total Budget Authority	$1,411.3	$987.0	$1,080.0	$93.0
Total Workyears	6.1	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 expand EPA's competitive supplier base in furthering 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; certified small businesses located in Historically Underutilized Business Zones (HUBZones); service-disabled veteran-owned small businesses (SDVOSBs); and women-owned small businesses. In accordance with Section 15(k), OSDBU further hosts and participates in an average of one small business outreach and training conference each month, providing needed technical assistance to hundreds of small businesses across the country.

In implementing the many statutory responsibilities required under Section 15(k), OSDBU reviews acquisition strategies to maximize small business procurement 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 reviews unsolicited proposals for agency acquisitions and assists small businesses in resolving payment issues under EPA acquisitions. It further provides a broad range of training, outreach, and technical assistance to new and prospective small business awardees. Historically, data reported in the Federal Procurement Data Systems indicates that EPA awards an average of 40 percent of total acquisition dollars to small businesses annually – far exceeding the government-wide goal of 23 percent.

EPA has earned an "A" on SBA's last 10 government-wide Small Business Procurement Scorecards[70] for the Agency's record of excellence in affording small business contracting opportunities. EPA also received a special Certificate of Recognition from the U.S. Small Business

[70] For more information, please see: https://www.sba.gov/sites/default/files/2019-06/EPA.pdf.

Administration for being one of only a handful of federal agencies to achieve that record.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Create Consistency and Certainty in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, the Program will:

- Expand EPA's electronic tools and mechanisms for identifying the projected contracting spend of individual offices to more effectively align small business contracting opportunities and structure agencywide small business vehicles to achieve greater efficiencies, costs savings, and value consistent with the President's Management Agenda Cross-Agency Goal 7 for Category Management. In FY 2019, OSDBU crafted a strategy for ensuring the maximum practicable utilization of small businesses in agency acquisitions of common goods and services within the Category Management framework. Building on that strategy, in FY 2021, OSDBU will continue efforts to support the implementation of the government-wide Category Management initiative by training EPA's Small Business Specialists to serve as designated experts in each of EPA's primary categories of common contracting spend.

- Strengthen EPA's small business subcontracting program by providing contracting officer training on maximizing small business subcontracting opportunities and by developing a monitoring program to ensure large business compliance with their required small business subcontracting plans. EPA fully implemented the newly enacted provisions of Section 15(k)(20), which require each agency OSDBU to review all subcontracting plans to "ensure that the plan provides the maximum practicable opportunity for small business concerns." In addition to dedicating resources to conduct the reviews, in FY 2019, OSDBU standardized the review procedures. The training and compliance monitoring program planned for FY 2021 will further assist in expanding the utilization of small businesses on the subcontracting level.

- Issue a comprehensive small business contracting manual that will streamline, standardize, and simplify EPA's small business contracting processes and procedures to strengthen operational efficiency, effectiveness, and compliance with governing statutory requirements. The manual will serve as a centralized and authoritative repository of internal EPA small business contracting requirements, guidance, processes, and procedures. It will be accessible electronically agencywide.

- Leverage existing and emerging collaborative tools, resources and technology to provide important small business technical assistance required under Section 15(k) of the Small Business Act, including releasing a new small business resource guide and electronic information to educate a broad and diverse spectrum of small businesses. In addition to supporting small businesses seeking to do business with the federal government, the planned access to additional information also will assist EPA in maintaining a qualified small business industrial base to help meet the Agency's mission needs.

- Continue to build on successes in refining OSDBU's Small Business Contracting

Dashboard issued in FY 2018, by working with a contractor to develop an automated process to report granular real-time small business goal accomplishments to inform the Agency's acquisition planning and strategies. In FY 2019, OSDBU explored available vendor solutions for more granular reporting. During FY 2021, OSDBU will collaborate with EPA's contracting office to engage contractor support to develop the automated reporting process.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$290.0) This change is an increase due to the recalculation of base payroll costs.

- (–$197.0) This program change reflects the fact that EPA will prioritize activities to maintain compliance with its statutory obligations under the Small Business Act.

Statutory Authority:

15 U.S.C § 644(k).

State and Local Prevention and Preparedness
Program Area: Information Exchange / Outreach
Goal: A Cleaner, Healthier Environment
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$12,588.0***	***$13,594.0***	***$10,862.0***	***-$2,732.0***
Total Budget Authority	$12,588.0	$13,594.0	$10,862.0	-$2,732.0
Total Workyears	53.3	63.1	46.9	-16.2

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 from chemical facilities.

Under Section 112(r) of the 1990 Clean Air Act (CAA) Amendments, chemical facilities that store more than a certain amount 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.[71]

The Emergency Planning and Community Right–to-Know Act (EPCRA) of 1986 was created 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 releases from these facilities through the development of local emergency response plans.[72]

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination, in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, the State and Local Prevention and Preparedness Program will perform the following activities:

[71] For additional information, please refer to: https://www.epa.gov/rmp.
[72] For additional information, please refer to: https://www.epa.gov/epcra.

- Inspect 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.[73] EPA prioritizes inspections at high-risk facilities.

- Provide basic and advanced RMP and EPCRA inspector training for federal and state inspectors.

- Maintain 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.

- Develop limited 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.

- Implement provisions of the final RMP Reconsideration rule, including drafting and revising facility guidance, training EPA regional and delegated state agency inspectors on revised rule provisions, and revising the RMP database to accept modified submissions.

EPA is proposing to develop a new program that would authorize EPA to collect and use fees for compliance assistance which can assist RMP facilities in complying with EPA regulations. This fee and service will be voluntary.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$964.0) This change is an increase due to the recalculation of base payroll costs.

- (-$3,696.0 / -16.2 FTE) This net program change reduces resources for technical support and outreach. This change will eliminate grant support for certified RMP inspectors in FY 2021.

[73] Located in the EPA RMP database.

Statutory Authority:

The Emergency Planning and Community Right-to-Know Act (EPCRA); the Clean Air Act (CAA) § 112(r).

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$12,136.9***	***$12,155.0***	***$8,065.0***	***-$4,090.0***
Total Budget Authority	$12,136.9	$12,155.0	$8,065.0	-$4,090.0
Total Workyears	32.0	37.0	20.8	-16.2

Program Project Description:

EPA's success in carrying out its mission to protect human health and the environment is contingent on collecting timely, accurate, and relevant information. The Toxics Release Inventory (TRI) Program[74] supports EPA's mission by annually publishing for the public: release, other waste management (e.g., recycling), and pollution prevention data on over 650 toxic chemicals from approximately 21,000 industrial and federal facilities. The Program collaborates with other environmental programs on additional sector analyses, such as with the food sector concerning reducing food waste, to describe relevant trends in toxic chemical releases and waste management practices, and to support innovative approaches by industry and other partners to reduce pollution. The TRI Program is a premiere source of cross-media toxic chemical release data for communities, non-governmental organizations, industrial facilities, academia, and government agencies at the local, state, tribal, federal, and global levels.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in the Marketplace in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, EPA will continue to focus on the collection of chemical release and other waste management data and making the data available to governments and the public.

EPA will continue to provide reporting facilities with an online reporting application, *TRI-MEweb*, to facilitate the electronic preparation and submission of TRI reports through EPA's Central Data Exchange (CDX).[75] In addition, the TRI data collected by EPA are shared with states, tribes, and territories that have an active node on CDX and are partners of the TRI Data Exchange (TDX).[76] EPA will continue to maintain the TDX used by states, tribes, and territories. The Agency also will continue to support the TRI Processing System (TRIPS) database, which is the repository for TRI data. Maintaining these data includes data quality activities and transmitting the data to

[74] For additional information, please visit: http://www.epa.gov/tri/.
[75] To access the CDX, please visit: https://cdx.epa.gov/.
[76] For additional information, please visit: https://www.epa.gov/toxics-release-inventory-tri-program/tri-data-exchange.

EnviroFacts[77] and other databases in support of the public's access to TRI data. In FY 2021, additional activities include continued streamlining of the application and database using the EPA Lean Management System (ELMS) process to include feedback from users (*i.e.*, communities, academia, industry, states, and tribes) and the Program.

In FY 2021, the Program intends to collect performance data by conducting at least 600 data quality checks that ensure the accuracy and completeness of the reported data and thereby improve the Program's analyses of chemical releases and wastes. The Program will continue to publish the annual *TRI National Analysis*[78], which describes relevant trends in toxic chemical releases as well as trends in other waste management practices and innovative approaches by industry to reduce pollution.

Further, in advancing EPA's commitments as outlined in the FY 2020-2021 Agency Priority Goal Per- and Polyfluoroalkyl Substances (PFAS) Action Plan, by September 30, 2021, EPA will meet several of the designated Priority Action milestones to establish a framework to understand and address PFAS. The TRI Program will continue to determine whether data and information are available on PFAS to fulfill the statutory listing criteria and to publish a notice-and-comment rulemaking should such data and information support the listing of those chemicals.[79]

As part of EPA's Toxic Substances Control Act (TSCA) Program, EPA is working to evaluate the health and environmental risks of 10 chemicals identified by the Agency in December 2016, as well as a further 20 high-priority chemicals designated in December 2019 and two other chemicals pursuant to a manufacturer request. TSCA requires that additional chemicals will be selected for evaluation in the future, maintaining 20 EPA-initiated evaluations on an on-going basis. Many chemicals identified for evaluation also are likely to be TRI chemicals, and the TRI database has provided information to support EPA's risk evaluation work. During FY 2021, as more TRI chemicals undergo risk evaluation by EPA, the TRI Program will support those risk evaluations by providing EPA risk assessors with information from the TRI database that can be used to identify conditions of use, and evaluate and estimate occupational, general population, and subpopulation exposures.

Since electronic systems that collect and disseminate TRI data largely have been developed already, the focus will be on operations and maintenance of *TRI-MEweb*, TRIPS, and the streamlining of business processes that contribute to quality control processes and 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.) further reducing O&M cost. This also will improve integration/consistency with other cloud-based systems and applications and will provide quicker data processing and enhance TRI's analytical capabilities by using applications such as *Qlik*. Emphasis also will be placed on optimizing search and data transfers within *EnviroFacts*, the system that provides public access to the statutorily required data submitted by industry. Use of enterprise infrastructure and services as

[77] *EnviroFacts* may be accessed at: https://enviro.epa.gov/.
[78] 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 reports; the National Analysis on RY 2018 data will be made available in early 2020.
[79] Additional information may be found on pp. 18-19 of EPA's *PFAS Action Plan*, which may be accessed at: https://www.epa.gov/sites/production/files/2019-02/documents/pfas_action_plan_021319_508compliant_1.pdf.

well as a commitment to continuous service improvement will allow the Program to meet statutory requirements for industry reporting and public access to TRI as efficiently as possible.

As required by the Emergency Planning and Community Right-to-Know Act (EPCRA), the Agency will respond to EPCRA chemical petitions regarding TRI within 180 days after receipt.[80] Petitions may request the addition or deletion of chemicals. Petitions also may address industry sector coverage. The quantity and complexity of petitions are unknown until submitted to EPA.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$635.0) This change is an increase due to the recalculation of base payroll costs.

- (-$3,781.0 / -14.1 FTE) This program change: reduces funding for certain TRI trend and comparative analyses, communication initiatives, and tool enhancements; refocuses the TRI program to key Agency focus areas, such as supporting Agency PFAS work and the TSCA Program; and reflects streamlining of the TRI Program as TRI information can increasingly be accessed remotely via databases and web tools. This program change also is a reduction in contractual costs for producing TRI annual reports as a result of the TRI Electronic Reporting Rule.

- (-$944.0 / -2.1 FTE) This net program change reduces resources for operations and maintenance for TRI tools in *EnviroFacts*, Data Processing Center operations, Help Desk activities, and security upgrades. In addition, enhancements for TRI-MEweb and TRIPS are eliminated, while facilitating the planned streamlining of the TRI Program, as TRI information can increasingly be accessed remotely via databases and web tools.

Statutory Authority:

Emergency Planning and Community Right-to-Know Act (EPCRA) § 313; Pollution Prevention Act of 1990 (PPA) § 6607.

[80] 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.

Tribal - Capacity Building
Program Area: Information Exchange / Outreach
Goal: More Effective Partnerships
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$13,780.0***	***$13,072.0***	***$14,099.0***	***$1,027.0***
Total Budget Authority	$13,780.0	$13,072.0	$14,099.0	$1,027.0
Total Workyears	76.5	74.6	72.0	-2.6

Program Project Description:

EPA is responsible for protecting human health and the environment in Indian country under federal environmental statutes. Under the Agency's 1984 Indian Policy,[81] EPA works with federally recognized tribes (tribes) on a government-to-government basis, in recognition of the federal government's trust responsibility to tribes, to implement federal environmental programs. In the 1984 Indian Policy, "EPA recognizes tribes as the primary parties for setting standards, making environmental policy decisions, and managing programs for reservations consistent with agency standards and regulations," therefore, EPA assists tribes in developing the programs to make such decisions. In the absence of a program delegation to a tribe, the Agency directly implements the Program. This program also supports the Categorical Grant: Tribal General Assistance Grants Program.

EPA's American Indian Environmental Office leads agencywide efforts to ensure environmental protection in Indian country. Please see http://www.epa.gov/tribal for more information.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in the *FY 2018 – 2022 EPA Strategic Plan*. Overall, the Agency has made steady progress towards strengthening human health and environmental protection on tribal lands. EPA will further its priority of strengthening tribal partnerships and continue to work toward its goal of building tribal capacity through a number of mechanisms in FY 2021. In addition, the Agency continues the direct implementation assessment effort to better understand EPA's direct implementation responsibilities and activities on a program-by-program basis in Indian country.

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

[81] 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.

financial assistance to ensure tribal governments have the opportunity to build the capacity to meaningfully participate and engage in environmental protection activities. To date, EPA has approved 83 TAS regulatory program delegations to tribes, including 20 approvals for compliance and enforcement authority. EPA had 17 DITCAs with tribes in place in FY 2020.

Indian Environmental General Assistance Program (GAP) Capacity Building Support: 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*.[82] In FY 2021, EPA will continue to administer GAP financial assistance to build tribal capacity and address environmental issues in Indian country. EPA's work in FY 2021 also will continue to enhance EPA-Tribal partnerships through development and implementation of EPA-Tribal Environmental Plans (ETEPs) and a continued focus on tracking and reporting measurable results of GAP-funded activities.

GAP Performance Measurement:
In FY 2020, EPA will complete an evaluation of the program implementation under the 2013 GAP guidance and anticipates developing revised Guidance for tribal consultation. Once revised Guidance is finalized, in FY 2021, EPA will adjust the performance management application to align with the revised Guidance and begin compiling and analyzing data. The IT-based performance application will provide a data-driven basis for supporting funding decisions, funding priorities and contribute to program accountability.

Tribal Consultation: In working with the tribes, EPA follows its *Policy on Consultation and Coordination with Indian Tribes.* [83] The Consultation Policy builds on EPA's 1984 Indian Policy and establishes clear agency standards for a consultation process promoting consistency and coordination. Since 2011, EPA has completed over 500 Tribal Consultations, an important Agency milestone under the EPA Tribal Consultation Policy. EPA completed 64 tribal consultations in FY 2019. In FY 2021, 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.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$1,138.0) This change is an increase due to the recalculation of base payroll costs.

[82] Please refer to https://www.epa.gov/tribal/2013-guidance-award-and-management-general-assistance-agreements-tribes-and-intertribal for further information.
[83] Please refer to: https://www.epa.gov/tribal/forms/consultation-and-coordination-tribes.

- (-$111.0 / -2.6 FTE) This program change reduces contract program support for some tribal capacity building efforts.

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: More Effective Partnerships
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$7,011.4***	***$6,553.0***	***$10,628.0***	***$4,075.0***
Total Budget Authority	$7,011.4	$6,553.0	$10,628.0	$4,075.0
Total Workyears	35.5	32.4	20.7	-11.7

Program Project Description:

The United States works with international partners to address international sources of pollution, 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, food crops and food chains, and can accumulate in foods such as fish. Healthy environments, ecosystems, and communities provide the foundation for economic development, food security, and sustainable growth.

EPA's work with international partners and organizations is essential to addressing transboundary pollution adversely impacting the United States. 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.

An important example of work under the Program 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 food waste, marine litter, resource efficiency, and air quality. In addition, EPA's engagement with the World Health Organization 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.

FY 2021 Activities and Performance Plan:

Work in the Program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, EPA will continue to engage both bilaterally and through multilateral institutions to improve international cooperation to prevent and address the transboundary movement of pollution. Specifically, EPA will engage with key priority countries to address air pollution that contributes significant pollution to the domestic and international environment. For example, a number of 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 while improving air quality conditions in the United States.

US-Mexico Canada Trade Agreement (USMCA):

In FY 2021, 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 USMCA trade agreement, utilizing both redirected base resources and additional investment. EPA activities will include monitoring and verifying provisions pertaining to global and national environmental requirements in the agreement and providing subject matter expertise.

Marine Litter

EPA will continue to engage multilaterally and bilaterally to prevent and reduce marine litter, an increasingly prominent global issue that can negatively impact domestic water quality, tourism, industry and public health in the U.S. Since 80 percent of marine litter comes from land-based sources of waste, countries with inadequate waste management contribute to the pollution in our shared oceans. EPA will build on groundbreaking efforts in the G7, the G20, and the United Nations Environment Assembly (UNEA) to support and advance comprehensive approaches including technology innovation and sharing of best practices. EPA will continue to work with other federal agencies to advance sound policy approaches for global action on marine litter.

In FY 2021, EPA will share tools and technical assistance related to expanding 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 action plan(s) to reduce leakage of trash to the environment and identifying steps to implement relevant and applicable waste collection / management systems and modest implementation projects where possible.

Food Waste

In FY 2021, EPA will continue to build cooperation with the United Nations and the Office of Management and Budget to ensure that on methodologies used to track international progress on reducing food waste accurately reflect U.S. progress. With the additional requested funds, the Agency also will scope pilot projects to reduce food waste that is an increasing portion of landfill waste in rapidly urbanizing developing country cities. These projects are aimed at exporting U.S. technology and innovative strategies to improve the environment. For example, EPA will bring together experts from the US government, non-governmental organizations (NGOs), academia, and the private sector 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 food. EPA will continue technical and policy assistance for global and regional 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[84], 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 in order to protect the U.S. population from mercury emissions originating in other countries, including from artisanal and small-scale gold mining. 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.

Performance Measure Targets:

(PM PAM1) Number of EPA actions to address international marine litter priorities.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target								6	Actions
Actual									

Work under this program supports performance results in the Surface Water Protection Program under the EPM appropriation and, in the RCRA: Waste Minimization & Recycling Program under the EPM appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$82.0) This change is an increase due to the recalculation of base payroll costs.
- (+$3,055.0 / +3.0 FTE) This increase supports EPA's participation in international fora, the development and sharing of tools through technical assistance, and the implementation of bilateral agreements to reduce ocean pollution and plastic.
- (+$661.0 / +0.5 FTE) This increase supports EPA's work on food waste reduction methodologies and scoping projects that focus on U.S. best practices and technologies to reduce food waste with key international partners.
- (+$465.0 / +3.0 FTE) This increase supports work on implementation of the Environment Chapter of the US-Mexico-Canada (USMCA) trade agreement, including monitoring and verification on provisions pertaining to global and national environmental requirements, coordination with other agencies, and provision of subject matter expertise.

[84] For more information, please see: https://www.epa.gov/international-cooperation/minamata-convention-mercury and www.mercuryconvention.org.

- (+$450.0) This increase restores EPA's contribution to the Commission for Environmental Cooperation in FY 2021.

- (-$638.0 / -18.2 FTE) This reduction supports the continued reprioritization of agency activities. The program will focus efforts on the highest priority international issues.

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.

Trade and Governance
Program Area: International Programs
Goal: More Effective Partnerships
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$5,716.8***	***$5,365.0***	***$0.0***	***-$5,365.0***
Total Budget Authority	$5,716.8	$5,365.0	$0.0	-$5,365.0
Total Workyears	14.4	15.3	0.0	-15.3

Program Project Description:

Since the 1972 Trade Act mandated the U.S. Trade Representative 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 and the Trade Policy Review Group - 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.

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021. EPA will continue its participation in the North American Commission for Environmental Cooperation (CEC) and other international forums, as appropriate, through the International Sources of Pollution program project.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$5,365.0 / -15.3 FTE) This funding change proposes to eliminate the Trade and Governance Program.

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.

US Mexico Border
Program Area: International Programs
Goal: More Effective Partnerships
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$3,236.0***	***$2,693.0***	***$0.0***	***-$2,693.0***
Total Budget Authority	$3,236.0	$2,693.0	$0.0	-$2,693.0
Total Workyears	12.5	12.4	0.0	-12.4

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, where the benefits of international programs are perhaps most apparent. This region accounts for three of the ten poorest counties in the U.S., with an unemployment rate 250-300 percent higher than the rest of the country.[85] In addition, over 430 thousand of the 14 million people in the region live in 1,200 colonias,[86] which are unincorporated communities characterized by substandard housing and unsafe drinking water or wastewater systems. 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.

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021. Projects historically funded along the border between the United States and Mexico may be eligible for funding under the Clean Water and Drinking Water State Revolving Funds.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$2,693.0 / -12.4 FTE) This funding change proposes to eliminate the U.S. Mexico Border Program.

[85] http://www.nnirr.org/drupal/sites/default/files/unm_the_us_mexico_border_region_at_a_glance.pdf
[86] Ibid

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).

IT/ Data Management/ Security

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$7,649.5***	***$7,593.0***	***$14,012.0***	***$6,419.0***
Hazardous Substance Superfund	$598.9	$693.0	$5,082.0	$4,389.0
Total Budget Authority	$8,248.4	$8,286.0	$19,094.0	$10,808.0
Total Workyears	18.7	13.1	12.8	-0.3

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: policy, procedure, and practice management; information security awareness, training, and education; governance and oversight; risk-based weakness management; operational security management; and incident detection, response, and recovery.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. Cybersecurity is a serious challenge to our nation's security and economic prosperity. Effective information security requires vigilance and the ability to adapt to new challenges every day. As reported to the Department of Homeland Security (DHS), in FY 2019, EPA experienced 194 confirmed incidents against its systems. As a result, the Agency has identified significant gaps in its ability to detect, respond to, protect against, and recover from attacks, which increase the risk to compromise agency information.

In response to DHS's *Cybersecurity Risk Management Assessment*, EPA will continue to leverage capabilities through the Continuous Diagnostics and Mitigation (CDM) Program. EPA will focus on closing existing gaps by identifying and alerting unauthorized hardware and software into the Agency's networks and systems, checking outbound traffic for unauthorized exfiltration, and assessing systems with a Security Content Automation Protocol. In addition to protecting EPA information assets, CDM will help the Agency identify and respond to federal-wide cybersecurity threats and incidents quicker and more efficiently.

EPA's cost to implement new and maintain existing CDM capabilities as mandated by the Office of Management and Budget (OMB) is estimated to be over $12 million in FY 2021 across all appropriations. In accordance with OMB Memorandum M-20-04 "Fiscal Year 2019-2020

Guidance on Federal Information Security and Privacy Management Requirements",[87] EPA also is developing a plan for the Agency's Security Operations Center to improve incident detection and response capabilities, which will be implemented by the end of FY 2020.

With available resources, EPA will work to close non-CDM capability gaps essential to adequately protect agency information assets. Such efforts include analyzing malicious email attachments, detecting and mitigating effects of insider threats and advanced persistent threats, and conducting program responsibilities, such as governance, oversight, and risk management. Additionally, the Agency practices Coordinated Vulnerability Disclosure, a standard process to decrease the harm or time an adversary can use to deny or disrupt services to its networks by working with internal stakeholders, private industry, and federal organizations to communicate vulnerabilities discovered or encountered.

Cybersecurity Risk Management Assessment metrics developed by the National Institute of Standards and Technology and industry best practices help prioritize action to adequately protect agency information assets and provide visibility on vulnerabilities. While EPA's cybersecurity posture is expected to remain at risk in FY 2021, the Agency will continue to conduct risk assessments and alternative analyses to determine which protections EPA must maintain or implement. The Agency is evaluating alternatives for Security Operations as a Service and cloud security options such as Cloud Access Security Brokers Services for possible implementation.

In FY 2021, the Information Security Program will continue to collect Federal Information Security Modernization Act (FISMA) metrics and evaluate related processes, tools, and personnel to continue to identify areas of weakness and opportunities for improvement. The Program will collect phishing test results and evaluate the effectiveness of awareness efforts. With these data, the Agency will identify strategies and prioritize areas to mitigate risks. The Agency will expand strategies for identifying and leveraging common controls while managing system boundaries to reduce compliance costs.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$185.0) This change is an increase due to recalculation of base payroll costs.

- (+$6,234.0 / -0.3 FTE) This program change supports mandatory cybersecurity requirements,[88] including CDM funding that will be used to close existing gaps by improving audit capabilities, ensuring accountability, and adding protections directly associated with the information.

[87] For more information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2019/11/M-20-04.pdf.
[88] Including those found in Federal Information Security Modernization Act of 2014 and Federal Information Security Cybersecurity Act of 2015.

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).

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$78,748.7***	***$80,223.0***	***$79,064.0***	***-$1,159.0***
Science & Technology	$3,092.6	$3,072.0	$2,890.0	-$182.0
Hazardous Substance Superfund	$13,755.5	$13,792.0	$13,874.0	$82.0
Total Budget Authority	$95,596.8	$97,087.0	$95,828.0	-$1,259.0
Total Workyears	391.4	459.4	469.9	10.5

Total workyears in FY 2021 include 172.0 FTE to support 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 get the information they need on-demand, to understand what it means, and to share environmental data. 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. EPA is committed to enhancing the power of information and delivering on-demand data to relevant parties. An example of this includes continued progress on enterprise data architecture and establishing the role of a Chief Data Officer as required by the Foundations for Evidence-Based Policymaking Act. The Agency's increased investment in TBM will enable EPA to make sound, data-driven IT investment decisions by incorporating critical IT expenditure data into EPA Chief Information Officer (CIO) portfolio reviews.

In FY 2021, EPA will strengthen further its IT acquisition review process as part of the implementation of federal Common Baseline Controls for FITARA. FITARA controls include an established communication and engagement strategy for the CIO with the Agency's programs and regional offices to ensure their IT plans are well designed, directly drive EPA long-term performance goals, and follow best practices. These controls also enable the CIO to engage closely with key IT stakeholders across EPA and to foster plans to refresh IT skills within the Agency.

The Agency will continue to focus on improving customer experiences to allow EPA, its partners, and the public to acquire, generate, manage, use, and share information as a critical resource. In line with the President's Management Agenda for IT modernization and for data, accountability, and transparency,[89] EPA will improve how it supports and manages the lifecycle of information and information products.

The FY 2021 President's Budget request includes additional resources to support upgrading the Agency's enterprise-wide records management system. The IT/DM Program will provide policies/procedures for digitization; IT architecture; and system development, implementation, and operations and maintenance support, as well as contribute to efforts to digitize hardcopy records and transition to centralized records/digitization centers. Work done with these additional resources support the long-term performance goal in the *FY 2018 – 2022 EPA Strategic Plan*: By September 30, 2022, reduce unused office and warehouse space by 850,641 square feet.

Further, the President's Budget request includes additional resources and FTE to support the cross-agency effort to reduce and better predict harmful algal blooms (HABs). The Program will provide data standards and geo-referencing expertise for EPA's research, predicative modeling and monitoring tools and analyses, and policy approaches to target and reduce nutrient pollution that causes HABs and impacts water quality across the country. Work done with these additional resources will support performance results for nutrient and HABs reductions.

In FY 2021, the following IT/DM activities will continue:

- **Data Management and Collection**: Data management and collection efforts include support for a variety of essential enterprise information management programs. The National Records Management Program will continue providing policies/procedures, coordination, and support to help fulfill EPA's statutory obligations to maintain records. The Discovery Services Program will continue supporting the search/collection of agency information needed to help respond to requests for information from external stakeholders. EPA will continue to coordinate and oversee the Agency's Information Collection Request (ICR) development and approval process, helping to ensure data collections are submitted timely and approved by the Office of Management and Budget (OMB) as required by the Paperwork Reduction Act. The Section 508 Program will develop training for different stakeholder communities. This program will assess documentation for all public-facing EPA systems/applications via an independent third party and acquire a compliance tool to improve reporting to OMB.

[89] For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2018/03/Presidents-Management-Agenda.pdf.

- **Mission Software and Digital Services Capabilities:** The FY 2021 President's Budget includes funding to continue to enhance the Agency's software development and architecture capability, including application development and deployment approaches and technical platforms. This program continues EPA's adoption of transformative technologies and practices, including cloud computing, agile development methodologies, and shared software development services.

- **Geospatial:** 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, the Agency can integrate and interpret multiple data sets and information sources to support environmental decisions. GeoPlatform will continue to publish internal and public mapping tools, which will better inform the public about EPA's programs to protect the environment and public health. As of December 2019, EPA has over 5,200 GeoPlatform mapping applications created or modified for public and internal use, and since calendar year 2014 the number of users has increased tenfold to over 9,000 users.

- **Information Access and Analysis**: EPA will focus on providing core support to agency infrastructure and tools that will drive better environmental decision making with data from across the Agency. EPA will partner with other agencies, states, tribes, and academic institutions to propose innovative ways to use, analyze, and visualize data. EPA'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 will continue to support Envirofacts and data visualization applications, which receive over 50 million annual application interface requests.

- **Information Technology and Infrastructure**: EPA will adjust the schedule for replacement or upgrades to align with resources and will continue to maintain and provide: desktop computing equipment, network connectivity, e-mail and collaboration tools, hosting services, remote access, telephone services, web and network services, and other IT-related equipment. In FY 2021, the Agency will continue efforts to consolidate EPA's data centers and computer rooms and to optimize operations within EPA's remaining data centers. In addition, the Agency will continue to modernize IT/IM infrastructure, applications, and services to empower a mobile workforce using innovative and agile solutions.

Performance Measure Targets:

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

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$6,405.0) This change is an increase due to recalculation of base payroll costs.

- (+$4,000.0) This program change is an increase for the Electronic Records focus area to continue progress towards upgrading the Agency's enterprise-wide records management system and enhancing the digitization of paper records, including those in support of implementing the Toxic Substances Control Act, Federal Insecticide, Fungicide, and Rodenticide Act, and Pesticide Registration Improvement Act. This investment can ultimately reduce costs and space needs and support ongoing program needs for information.

- (+$1,179.0 / +1.0 FTE) This program change is an increase to support data delivery as part of the multi-office Harmful Algal Bloom Reductions focus area. Within this total, $179.0 thousand is provided for salary and benefits costs.

- (-$12,743.0 / -13.5 FTE) This net program change modifies the timeline for development of new technologies to address agency needs such as new assistive technology tools, ability to re-platform legacy applications, and replace end of service IT equipment that provides basic workforce support across the Agency.

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

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$4,527.9***	***$4,835.0***	***$5,104.0***	***$269.0***
Total Budget Authority	$4,527.9	$4,835.0	$5,104.0	$269.0
Total Workyears	22.8	23.8	23.8	0.0

Program Project Description:

This program supports EPA's Administrative Law Judges (ALJ) and the Environmental Appeals Board (EAB).

Administrative Law Judges

The ALJ 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. The Fifth Amendment of the Constitution of the United States of America guarantees the regulated community the right to due process of the law. By adjudicating disputed matters, the ALJ furthers the Agency's mission to protect human health and the environment.

The ALJ provides the constitutionally guaranteed legal process and review for hearings and issues initial decisions in cases brought by the Agency's enforcement program against those accused of violations under various environmental, civil rights, and anti-fraud statutes. The right of affected persons to appeal those decisions is conferred by various statutes, regulations, and constitutional due process rights. The ALJ also offers an opportunity for alternative dispute resolution.

Environmental Appeals Board

The EAB is a four-member appellate tribunal established by regulation in 1992 to hear appeals and issue final 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 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 consistent with the Administrative Procedure Act (APA) and the applicable environmental statutes and under the authority delegated by the Administrator and pursuant to regulation.

The EAB adjudicates administrative appeals in a fair and timely manner in accord with the APA, ensuring consistency in the application of legal requirements. The EAB also resolves disputes efficiently, avoiding protracted federal court review. In over ninety 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, the ALJ will convene formal hearings in the location of the alleged violator or violation, as required by statute. In FY 2021, the ALJ will continue to implement its modernized filing and case management system to reduce mailing delays and costs. In FY 2021, the EAB will continue to implement its streamlined procedures for adjudicating permit appeals under all statutes and will continue to expedite appeals in Clean Air Act New Source Review cases and in FIFRA licensing proceedings.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$393.0) This change to is an increase due to the recalculation of base payroll costs.

- (-$124.0) This net program change reflects a reduction for managing an electronic filing and case docketing system.

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).

Alternative Dispute Resolution
Program Area: Legal / Science / Regulatory / Economic Review
Goal: More Effective Partnerships
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$667.4***	***$870.0***	***$0.0***	***-$870.0***
Hazardous Substance Superfund	$573.3	$710.0	$0.0	-$710.0
Total Budget Authority	$1,240.7	$1,580.0	$0.0	-$1,580.0
Total Workyears	4.3	5.9	0.0	-5.9

Program Project Description:

EPA's General Counsel and Regional Counsel Offices provide environmental Conflict Prevention and Resolution Center (CPRC) services and workplace conflict prevention. EPA utilizes CPRC as a method for preventing or resolving conflicts prior to engaging in formal litigation. CPRC includes the provision of legal counsel, facilitation, mediation, and consensus building advice and support. This program oversees a strategically-sourced contract for these services that provides mediation, facilitation, public involvement, training, and organizational development support to all headquarters and regional programs.

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021.

Performance Measures Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$870.0 / -4.5 FTE) This funding change proposes to eliminate the CPRC Program. Programs across the Agency may pursue ADR support services and training individually.

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: Greater Certainty, Compliance, and Effectiveness
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$8,972.5***	***$8,814.0***	***$9,780.0***	***$966.0***
Total Budget Authority	$8,972.5	$8,814.0	$9,780.0	$966.0
Total Workyears	44.6	54.4	48.3	-6.1

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.

The Office of Civil Rights (OCR), which has responsibility for Title VII Equal Employment Opportunity (EEO) complaints, affirmative employment analysis, and reasonable accommodations, accomplished the following in FY 2019: 1) submitted the annual Management Directive 715 (MD-715) report to the Equal Employment Opportunity Commission (EEOC); 2) provided MD-715 barrier analysis training to OCR staff and EEO Officers; 3) achieved a timeliness rate of 91 percent for Title VII investigations; 4) achieved 59 percent participation rate for Alternative Dispute Resolution (ADR); 5) trained and onboarded a new cadre of collateral duty EEO counselors; 6) processed over 650 Reasonable Accommodation (RA) requests; and 7) issued a new Special Emphasis Program Managers (SEPMs) manual which provided updated guidance and policies on effective implementation of civil rights affirmative employment goals to our SEPMs. OCR also relaunched the Deputy Civil Rights Official cadre which comprises of Senior Executive Service managers in each program and region who have lead responsibility for ensuring and advancing compliance with civil rights regulations, programs, and procedures.

OCR provides policy guidance and technical assistance internally on EEO and is responsible for carrying out the following functions:

- Employment Complaints Resolution including Title VII of the Civil Rights Act of 1964 and Executive Order 13672[90] - address complaints of employment discrimination;

- Affirmative Employment Analysis and Accountability - provide leadership, direction, and advice to managers to assist them in carrying out equal opportunity and civil rights responsibilities and report under the EEO Commission's Management Directive 715 (MD-

[90] For more information, please see: https://www.eeoc.gov/eeoc/history/50th/thelaw/11478_11246_amend.cfm.

715)[91] which provides guidelines for identifying triggers and conducting barrier analysis related to EEO within EPA's workforce; and

- Reasonable Accommodation - carry out EPA's responsibilities under the Rehabilitation Act of 1973 which requires the Agency to provide reasonable accommodation for individuals with disabilities, unless it would cause undue hardship for the Agency.

The External Civil Rights Compliance Office (ECRCO) carries out the external enforcement of several civil rights laws, including Title VI of the Civil Rights Act of 1964, that prohibit discrimination on the basis of race, color, national origin (including limited-English proficiency), disability, sex, and age, in programs or activities that receive federal financial assistance from EPA. ECRCO investigates and resolves external complaints, develops policy, conducts proactive compliance initiatives and compliance reviews, and provides technical assistance to recipients and outreach to communities.

During FY 2019, ECRCO developed and refined internal performance measures and successfully reduced the backlog of complaints under investigation and pending Jurisdictional Reviews. Currently, ECRCO has a total of two (2) "backlog" complaints pending – down from 17 at the end of FY 2018. All new complaints accepted for investigation in FY 2019 were resolved within 180 days of acceptance. By the end of FY 2020, ECRCO will have no backlog complaints under investigation. In addition, by the end of the first quarter of FY 2019, ECRCO had eliminated its backlog of pending Jurisdictional Reviews – down from four at the end of FY 2018. Furthermore, all new complaints received during the second, third, and fourth quarters of FY 2019, received Jurisdictional Reviews within the 20-day regulatory timeframe.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*.

Office of Civil Rights (Internal)

The Civil Rights Program is developing strategic plans for its internal, employment-related functions, including specific goals, implementation steps, and benchmarks that will serve as internal performance measures to ensure accountability for all of the functions. In FY 2021, EPA's Civil Rights Program will continue its strategic planning process with an emphasis on process improvement, internal performance measures, technology resources, and strategic human capital planning. These actions are consistent with measures called for in the EPA Report "Developing a Model Civil Rights Program at the EPA."[92]

[91] Equal Employment Opportunity Commission, *Equal Employment Opportunity Management Directive 715, October 1, 2013.*
[92] For more information, please see: http://intranet.epa.gov/civilrights/pdfs/training/ecfr-developing-a-model-civil-rights-program.pdf.

Title VII

In FY 2021, EPA will dedicate most of its financial resources to the processing of discrimination complaints, including EEO counseling, investigations, and drafting Final Agency Decisions. The Program will focus on process improvements to: 1) ensure prompt, effective, and efficient EEO complaint docket management; 2) enhance the EEO compliance program through strategic policy and training development; and 3) continue to strengthen the Alternative Dispute Resolution (ADR) Program. The Program will continue to:

- Conduct the recruitment process for collateral-duty EEO counselors, providing training and onboarding.
- Evaluate methods implemented to improve the timeliness of Final Agency Decisions, with a goal of meeting the EEOC's target of 60 days.
- Strengthen the ADR Program by providing training and marketing specific to both employees and management.
- Implement cross agency training for supervisors and staff to increase global understanding of the EEO process, and relevant roles and responsibilities.
- Assess how services are provided nationally to ensure their availability and efficient delivery.

Affirmative Employment Analysis and Accountability (AEAA)

In FY 2021, the Program will continue to focus on process improvements to: 1) ensure prompt, effective, and efficient development of critical and required reports, such as MD-715; 2) enhance the Affirmative Employment function through development of strategic policy, training and the engagement of critical internal EPA partners; and 3) evaluate accomplishments. The Program will continue to:

- Evaluate effectiveness of measures taken as a result of work completed under OCR's national priorities.
- Ensure the collection of applicant-flow data for career development opportunities within the Agency.
- Revitalize the Agency's Special Emphasis Program through an evaluation of its structure, resources, and effectiveness.
- Work with EEO Officers and other agency stakeholders to improve the process for developing the MD-715.
- Increase the availability of data from the AEAA Program through visual management (e.g., dashboards) and increased use of technology to demonstrate progress.
- Provide effective training and tools for managers in carrying out their responsibilities under MD-715 and the Diversity and Inclusion Strategic Plan.

Reasonable Accommodations (RA) Program

In FY 2021, the Program will continue to focus on process and technological improvements to ensure prompt, effective, and efficient RA request docket management. The Program also will

enhance the RA compliance function through development of strategic policy; training, and the engagement of critical internal EPA partners. The Program will continue to:

- Evaluate the procedures for providing Personal Assistant Services (PAS) to determine their effectiveness; as necessary, revise procedures.
- Update reasonable accommodation processes and templates to improve the timeliness, efficiency, and consistency of communications and to avoid release of sensitive personally identifiable information.
- Begin delivering more advanced RA training for both employees and management and incorporate aspects of PAS.
- Apply a user-based approach to the RA Program to enhance customer service ensuring customer expectations and needs are being met.

External Civil Rights, including Title VI

In FY 2021, the Program will look to update its Strategic Plan and reinvigorate its efforts 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. The current External Compliance Program Strategic Plan focuses on three key goals: Enhance Strategic Docket Managements; Develop a Proactive Compliance Program; and Strengthen ECRCO's Workforce to Promote a High Performing Organization. The Program will continue to place an emphasis on providing technical assistance and partnering with states; reviews; outreach to communities; strategic policy development; and prioritizing its workforce planning and training.

In FY 2021, ECRCO will continue to track internal performance measures to ensure: 1) all complaints pending under investigation have any "preliminary findings" issued within 180 days of acceptance for investigation; 2) all cases resolved through informal resolutions are resolved in a timely manner; and 3) all Jurisdictional Reviews are processed within 20 days. Also, beginning in FY 2020 and continuing through FY 2021, the Program will continue to deploy and refine an electronic case and document management system to manage the external civil rights complaint docket; refine its Case Resolution Manual that was reissued in FY 2020, including more specific guidance on ECRCO's Informal Resolution Process; provide guidance to recipients of EPA funds regarding their regulatory obligation to have in place a nondiscrimination program; and implement a contract to provide language assistance services to limited-English proficient customers throughout EPA. In FY 2021, ECRCO will continue the work launched in FY 2020 to focus internal performance measures on the Informal Resolution Process to ensure timely resolution and minimize any legal vulnerabilities while maximizing accountability and transparency. Specific initiatives include:

- Deployment of additional proactive technical assistance pilots to work collaboratively with states to build upon and strengthen each state's nondiscrimination program in light of the federal civil rights laws.
- Refinement of Chapter II of the Civil Rights Toolkit deployed in FY 2020 to share guidance regarding EPA recipients' nondiscrimination program responsibilities.

- Deployment of Chapter III of Civil Rights Toolkit to share guidance and promising practices with EPA recipients related to "Risk Communication" on environmental civil rights issues.
- Continued implementation of the Program's Functional Competency Framework which strengthens the Agency's workforce by promoting the development of a highly effective, performance-based organization, including individual development plans that include customized training objectives.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$1,691.0) This change is an increase due to the recalculation of base payroll costs.

- (-$725.0 / -6.1 FTE) This net program change reduces the Civil Rights Program through streamlining support for processing investigations for Title VI and Title VII complaints, enhancement of mandatory reporting, and improvements in the overall management of complaints and reporting processes.

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, 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; Genetic Information Nondiscrimination Act (GINA).

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$10,760.9***	***$10,152.0***	***$14,200.0***	***$4,048.0***
Total Budget Authority	$10,760.9	$10,152.0	$14,200.0	$4,048.0
Total Workyears	44.5	48.0	54.0	6.0

Program Project Description:

The Integrated Environmental Strategies (IES) Program advances the Agency's mission of protecting human health and the environment while promoting economic growth from the national level to the community level. The IES Program provides tools and resources to transform EPA into a more effective organization. Nationally, IES is focused on: 1) streamlining EPA's permitting processes; 2) working with industrial sectors to identify and develop sensible approaches to better protect the environment and public health; 3) collaborating with federal, state, municipal partners, communities, businesses, and other stakeholders to implement locally-led, community-driven approaches to environmental protection through technical assistance, policy analysis, and training; and 4) applying process improvement techniques and standards to EPA's activities.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.4, Streamline and Modernize in the *FY 2018 - 2022 EPA Strategic Plan*. This program demonstrates new approaches to streamline and reduce unnecessary burdens and to help communities meet their environmental and economic needs. In FY 2021, the Program will focus on permit streamlining, sector strategies, community-driven environmental protection, and Opportunity Zones.

Permit Streamlining

One way that EPA implements its statutory authority is through various permitting programs. These programs are based on a set of processes that vary across EPA program and regional offices. The Agency is focused on working across EPA program offices and with state and tribal co-regulators to streamline EPA's permitting processes in support of the President's Memorandum, "Streamlining Permitting and Reducing Regulatory Burdens for Domestic Manufacturing."[93] This work supports the long-term performance goal in the *FY 2018 – 2022 EPA Strategic Plan* to reach all permitting-related decisions within six months and the FY 2020 – 2021 Agency Priority Goal (APG) to accelerate permitting-related decisions. Between June 2018 through the end of FY 2019,

[93] For more information, please see: https://www.govinfo.gov/content/pkg/FR-2017-01-30/pdf/2017-02044.pdf.

EPA had reduced the backlog of new permit applications by over 65 percent (from 149 to 52, excluding Clean Air Act New Source Review and Title V Operating Permits)[94] through a series of targeted Lean events to improve the efficiency and effectiveness of permitting programs, achieving the target of the FY 2018-2019 APG. In addition, EPA also reduced its number of existing permit renewals in backlog by 13 percent (from 479 to 417).[95] In FY 2021, EPA will continue to improve its role in addressing cross-cutting permitting and policy issues and, in partnership with state permitting offices, will continue to streamline our review of state-issued permits. The Program will continue to facilitate and support the sharing and implementation of permitting best practices and approaches of environmental co-regulators to achieve efficient and effective permitting. In FY 2021, EPA will continue to coordinate with lead agencies on One Federal Decision and FAST-41 infrastructure project streamlining. In FY 2019, EPA served as either a participating or cooperating agency on over 40 major infrastructure projects.

Smart Sectors

EPA's Smart Sectors[96] is a partnership program that provides a platform for EPA to collaborate with regulated sectors of the economy to develop sensible approaches to protect the environment and public health. Since inception of the program the Agency has focused on 13 sectors. In FY 2019, EPA conducted site visits covering the operations of seven sectors, and participated in more than 700 substantive meetings with a variety of sectors. In FY 2019, and continuing in FY 2020, the Smart Sectors Program has created a Sector Snapshot[97] for each participating sector and will be making them available on EPA's website. In addition, each EPA regional office has launched their own Smart Sector initiative focusing on sectors important to that region. In FY 2021, Smart Sectors will continue to update the Sector Snapshot for each participating sector, providing environmental and economic data and highlighting best practices. The Smart Sectors Program also will continue providing sector ombudsmen to connect, facilitate, and convene Agency experts with sector representatives to solve discrete policy, guidance, and implementation issues unique to the sectors. EPA also will continue working to reduce recordkeeping and reporting burden where appropriate.

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 2019, the Program delivered direct technical assistance to

[94] The FY 2018-2019 APG includes reporting for backlog new permit applications under the following programs: National Pollutant Discharge Elimination Systems (NPDES), Underground Injection Control (UIC), Resource Conservation Recovery Act (RCRA) Subtitle C, and Approvals to Store, Decontaminate or Dispose of Polychlorinated Biphenyls (PCBs) under Toxic Substances Control Act (TSCA).

[95] The FY 2020-2021 APG for EPA permits in backlog has been expanded to include backlogged applications to renew existing permits as well as pending new applications. In addition, the APG includes reporting of backlogged permits issued under the Clean Air Act. For the FY 2020-2021 APG, EPA will report backlog for the following permit categories: NPDES, UIC, RCRA Subtitle C, New Source Review, Title V, and Approvals to Store, Decontaminate or Dispose of PCBs under TSCA.

[96] For additional information, please refer to: https://www.epa.gov/smartsectors.

[97] The sector snapshots tool is a new, interactive, web-based application that provides environmental and economic information about several industries participating in EPA's Smart Sectors program. The sector snapshots application employs a novel approach by assembling a range of environmental and economic data from different publicly-available sources to provide an integrated, easy–to–understand picture for each sector over the last 20 years. For additional information, please refer to: https://www.epa.gov/smartsectors/sector-snapshots.

more than 30 communities: over 60 percent of these communities included Opportunity Zones. In FY 2020, the Program is developing new technical assistance approaches specifically focused on enabling communities to take advantage of the Opportunity Zones incentive, attracting private investment.

In FY 2021, EPA requests an additional $5.1 million (including 12.0 FTE) to support Opportunity Zone efforts. The new resources will strengthen efforts in economically distressed communities to leverage public and private sector investments to support improved economic development and environmental outcomes. Additional FTE located in EPA's regional offices will provide technical assistance for revitalization projects in Opportunity Zones by 1) assessing actions EPA can take to prioritize federal investment in these areas; 2) working to minimize regulatory and administrative burden that discourages investment; 3) helping local applicants identify and apply for EPA and other federal resources; 4) coordinating EPA's regional efforts; and 5) measuring results. The additional resources will significantly expand EPA's capacity to hold additional community workshops and trainings; assist states in adopting policies and programs that support community revitalization and environmental protection in Opportunity Zones; and work directly with up to 60 communities to help leverage Opportunity Zone incentives and resources to support revitalization. In FY 2021, the Program will continue to lead, along with the 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 deserving communities. Technical assistance and training are the cornerstone of EPA's cooperative approach to addressing environmental challenges in communities, particularly communities that are economically distressed. In FY 2021, EPA will continue to emphasize technical assistance and training, with the objective of helping tribal, state, and local governments increase their capacity to protect the environment while growing their economies, creating jobs, and using public and private sector investments and other resources more efficiently. 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 economic revitalization.

In FY 2021, the Program will continue analyses on emerging trends, innovative practices, and tools that support clean air, land, and water outcomes. EPA will continue to develop tools to help interested communities incorporate innovative 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, reducing combined sewer overflows, improving local air and water quality, cleaning up and reusing previously developed sites, and supporting revitalization and redevelopment in economically distressed communities including those located in Opportunity Zones.

Process Improvement and EPA's Lean Management System (ELMS)

In FY 2018, EPA introduced the EPA Lean Management System (ELMS), which uses Lean principles, practices, and tools, and has enhanced the Agency's performance management framework. ELMS is a means to promote continuous improvement, and paired with routine monitoring, measurement, and engagement, it supports EPA employees in identifying and solving problems and sustaining improvement. As part of ELMS, the Agency's senior leaders hold

monthly business meetings to discuss performance results and actions needed to make improvements.

The Agency is deploying ELMS to support the accomplishment of the Agency's priorities by increasing efficiencies and making operational process improvements. Routine monitoring, measurement, and engagement, enable the Agency to identify problems while they are still small, solve problems before they become too big, and sustain improvements over time to carry out their work more efficiently and effectively. The Office of Continuous Improvement (OCI) is providing training and technical assistance to EPA offices on deploying visual management and using Lean and other business process improvement principles and tools to streamline and standardize processes, analyze root causes of problems, and assess progress monthly towards performance measures.

Through the deployment of visual management, standard work, and problem solving tools, in FY 2019, EPA completed initial ELMS deployment to 4,522 EPA staff and implemented 66 process improvements, exceeding its target of 50 and. A process is considered improved when it achieves a 25 percent improvement over the baseline. Examples of process improvements include:

- EPA Region 5 Great Lakes National Program Office reduced their funding timeframes for Great Lakes Restoration Initiative Grants from 34 days to 14 days with more than three months of sustained improvement (59 percent improvement).
- EPA Region 9 Land Division streamlined the tribal grants process, reducing from 136 steps to 56 steps (59 percent improvement).
- EPA Region 7 Air and Radiation Division improved the quality of draft Title V Operating Permits from a 14 percent first time quality rate to an 84 percent first time quality rate and is continuing to improve (500 percent improvement).
- EPA's Office of the Chief Financial Officer and Office of Compliance improved the Superfund Cost Recovery process by decreasing the number of days to complete a cost recovery request from 30 days to five days (83 percent improvement).

The Agency expects each EPA regional or program office to report at least 10 process improvements by FY 2022. Additionally, the expectation is for an increase in process improvements to be documented in FY 2020 as ELMS expands across the Agency. Related to improving the permit process, the Agency is deploying ELMS to support states with improving their environmental permitting processes. EPA deployed ELMS to Maryland Department of Environment (MDE) in June 2019 and is slated to support numerous other states in FY 2020.

Performance Measure Targets:

(PM OZ1) Percentage of communities receiving direct technical assistance that have opportunity zones.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target							60	70	Percent
Actual									
Numerator									Communities
Denominator									

(PM PE2) Number of new permit applications in backlog.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target						No Target Established	33	0	Permits
Actual					111	65			

(PM PE3) Number of existing permit applications in backlog.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target							313	209	Permits
Actual						417			

(PM OP1) Number of operational processes improved.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					25	50	72	72	Operational Processes
Actual					N/A	66			

FY 2021 Change from the Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$207.0) This change is an increase due to the recalculation of base payroll costs.

- (+$5,144.0 / +12.0 FTE) This program change supports EPA's Opportunity Zones focus area and will support states, communities, and investors in implementing the Opportunity Zone initiative to facilitate community revitalization and environmental protection. The additional resources support community-based engagement, training, and technical assistance to advance revitalization efforts in Opportunity Zones.

- (-$1,303.0 / -6.0 FTE) This net program change reduces the Integrated Environmental Strategies Program through streamlining of the community work and climate adaptation efforts within the 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).

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$51,526.8***	***$47,978.0***	***$50,263.0***	***$2,285.0***
Hazardous Substance Superfund	$515.0	$543.0	$608.0	$65.0
Total Budget Authority	$52,041.8	$48,521.0	$50,871.0	$2,350.0
Total Workyears	258.2	257.4	242.8	-14.6

Total workyears in FY 2021 include 5.5 FTE funded by TSCA fees and 1.0 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 EPA'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 the Agency relies on for all decisions and activities in furtherance of its mission to protect human health and the environment.

This program provides counsel on every major action the Agency takes. It plays a central role in all statutory and regulatory interpretation of new and existing rules and all rule and guidance development under EPA's environmental authorities. This program provides essential legal advice for every petition response, every judicial response, and every 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, this program provides counsel on the Agency's authority to take that action; it then provides the advice and support necessary to finalize and implement that action. When that action is challenged in court, this program in coordination with the Department of Justice, defends it.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Create Consistency and Certainty and the long-term performance goal in the *FY 2018-2022 EPA Strategic Plan*. In FY 2019, EPA began to develop a revised methodology to consider the scope for tracking the long-term measure.

This program provides legal representation in more than 350 defensive judicial cases each year. It is projected that the number of cases in FY 2021 will exceed this number. The Program will continue to provide legal representation in judicial and administrative litigation for core Agency environmental programs and for Agency priorities. The Program also will provide counseling outside of the litigation context in the highest priority issues arising under all the legal environmental statutes administered by EPA.

In FY 2021, the Agency will continue to focus on its core mission to apply the most effective approaches by implementing EPA's environmental programs under the Resource Conservation and Recovery Act, Leaking Underground Storage Tanks, Clean Air Act, Clean Water Act, Toxic Substances Control Act (TSCA), Federal Insecticide Fungicide and Rodenticide Act, Food Quality Protection Act, Safe Drinking Water Act, and other statutes. This strategy will help ensure that human health and the environment are protected, including clean air, water, and land, and safe chemicals and pesticides.

Legal counseling resources also 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 requiring them to undertake new economic 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 examples illustrate this program's important role in implementing the Agency's core mission:

- On June 19, 2019, EPA finalized the Affordable Clean Energy Rule which replaced the Clean Power Plan.

- EPA is providing critical legal advice and litigation defense in support of EPA's implementation of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, which modernized and substantially overhauled TSCA.

Performance Measure Targets:

(PM RG1) Percentage of legal deadlines met by EPA.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					No Target Established	No Target Established			Percent
Actual					N/A	N/A			
Numerator									Legal Deadlines
Denominator									

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$3,257.0) This change is an increase due to the recalculation of base payroll costs.

- (-$972.0 / -17.8 FTE) This program change reduces legal support. EPA will focus on counseling and legal advice to the highest Agency priorities and focus on litigation support to help ensure that human health and the environment are protected.

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
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$14,926.0***	***$14,478.0***	***$18,082.0***	***$3,604.0***
Total Budget Authority	$14,926.0	$14,478.0	$18,082.0	$3,604.0
Total Workyears	76.4	85.7	90.4	4.7

Total workyears in FY 2021 include 3.5 FTE funded by TSCA fees and 10.7 FTE to support Legal Advice working capital fund (WCF) services.

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. It provides legal counsel and support on issues including, but not limited to: appropriations, claims, contracts, employment law, grants, information law, intellectual property law, real property, and all aspects of civil rights law.

For example, if an EPA program office needs guidance on how to respond to a Freedom of Information Act (FOIA) request, whether it may spend money on a certain activity, or what to do when a plaintiff files a tort claim against the Agency, this program provides answers, options, and legal advice. This program also supports EPA in maintaining high ethical standards and complying with all laws and policies that govern the Agency's operations.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018-2022 EPA Strategic Plan*. In FY 2021, EPA will continue to address and manage information requests, as well as provide 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.

In addition to the increase in employee and labor relations matters, litigation and appeals under FOIA have continued to increase steadily in both number and complexity. In FY 2021, EPA will continue to focus on responding to the increased number of complex and challenging information requests. Targeted legal counseling will be provided to ensure appropriate responses for FOIA requests.

In FY 2021, the Agency will continue to progress toward its long-term performance goal to reduce its FOIA backlog by FY 2022. By the end of FY 2019, EPA reduced its FOIA backlog to 2,128, this was 409 (or 16 percent) below the baseline that was set at 2,537 in April 2018, short of the 25 percent targeted reduction.

This program will continue its efforts in meeting FOIA's requirements and increasing transparency by:

- Providing various trainings for Agency FOIA professionals to ensure that EPA is effectively and efficiently responding to the public's FOIA requests. In FY 2021, EPA will continue to provide FOIA training for the Agency's supervisors to ensure that supervisors fully understand the relevant legal requirements. EPA also will improve the FOIA intake and assignment process, process FOIA appeals, and provide FOIA legal counseling, all to enhance EPA's FOIA response timeliness and accuracy.

- Implementing the Agency's FOIA regulations by updating EPA's FOIA Policy and Procedures; issuing guidance;[98] and providing project management, coordination, and legal counseling services for EPA's most complicated and challenging FOIA request projects.

Performance Measure Targets:

(PM FO1) Percentage reduction in overdue FOIA requests from the April 2018 baseline.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					No Target Estab-lished	25	50	75	Percent
Actual					-9	16			
Numerator					-224	409			Requests
Denominator					2,537	2,537			

Work under this program supports the FOIA long-term performance goal under Goal 2/Objective 2.2, Increase Transparency and Public Participation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$2,372.0) This change is an increase due to the recalculation of base payroll costs.

- (+$1,232.0 / -7.4 FTE) This net program change is an increase to focus on high priority FOIA cases and provide legal counseling and support for EPA's operations and a reduction in other legal support.

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).

[98] On June 26, 2019. EPA brought its FOIA regulations into compliance with 2007, 2009, and 2016 amendments to the FOIA. *Freedom of Information Act Regulations Update* (the "Rule"), 84 Fed. Reg. 30028 (June 26, 2019). EPA's FOIA regulations were last updated in 2002 and were significantly out of compliance with the amended statute.

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$1,224.3***	***$808.0***	***$0.0***	***-$808.0***
Total Budget Authority	$1,224.3	$808.0	$0.0	-$808.0
Total Workyears	1.4	1.7	0.0	-1.7

Program Project Description:

The Regional Science and Technology (RS&T) Program provides assistance to programs implementing the Resource Conservation and Recovery Act; Toxic Substances Control Act; Clean Water Act; Safe Drinking Water Act; Clean Air Act; and Comprehensive Environmental Response, Compensation and Liability Act. The RS&T Program performs laboratory analysis, field monitoring, and sampling analysis in order to provide credible scientific data on environmental pollutants and conditions to the Agency's decision makers.

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021. The Agency continues to work toward establishing a comprehensive enterprise-wide laboratory approach.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$808.0 / -1.7 FTE) This funding change proposes to eliminate the Regional Science and Technology Program.

Statutory Authorities:

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).

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$12,616.7***	***$13,094.0***	***$17,294.0***	***$4,200.0***
Total Budget Authority	$12,616.7	$13,094.0	$17,294.0	$4,200.0
Total Workyears	60.2	74.0	74.0	0.0

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 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 establishes compliance with Executive Order (EO) 13771 by ensuring that the costs and cost savings of EPA's actions are fully and appropriately estimated. The Program also ensures the Agency's regulations comply with additional statutory and EO requirements, including the Congressional Review Act, the Regulatory Flexibility Act (as amended by the Small Business Regulatory Enforcement Fairness Act), and EOs 12866 and 13563 regarding the Office of Management and Budget (OMB) regulatory review. EPA recently built a prototype economy-wide model and assessed under what circumstances economy wide impacts should be assessed. The Program also includes the Agency's newly appointed Chief Statistical Officer charged with implementing major elements of the *Foundations for Evidence Based Policy Act*.[99]

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Create Consistency and Certainty in the *FY 2018 - 2022 EPA Strategic Plan*. The Program assists the Administrator and senior Agency staff in implementing new regulatory policy priorities, including EO 13771[100] (Reducing Regulation and Controlling Regulatory Costs), EO 13777[101] (Enforcing the Regulatory Reform Agenda), EO 13783[102] (Promoting Energy Independence and Economic Growth), EO 13790[103]

[99] For more information, please see: https://www.congress.gov/115/plaws/publ435/PLAW-115publ435.pdf.
[100] For more information, please see: https://www.epa.gov/laws-regulations/executive-order-13771-reducing-regulation-and-controlling-regulatory-costs.
[101] For more information, please see: https://www.federalregister.gov/documents/2017/03/01/2017-04107/enforcing-the-regulatory-reform-agenda.
[102] For more information, please see: https://www.whitehouse.gov/presidential-actions/presidential-executive-order-promoting-energy-independence-economic-growth/.
[103] For more information, please see: https://www.whitehouse.gov/presidential-actions/presidential-executive-order-promoting-agriculture-rural-prosperity-america/.

(Promoting Agriculture and Rural Prosperity in America), and EO 13891[104] (Promoting the Rule of Law through Improved Agency Guidance Documents).

In FY 2021, EPA will continue its efforts to assess and review the costs and benefits to businesses, jobs, communities, 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 collect data and build models to assess regulatory proposals and their impacts on costs, benefits and economic performance. Planned key program activities include:

- Continue to work on a model of the U.S. economy. This model is ideally suited to assess how regulations affect the economy, including distributional impacts, costs, and broader macro-economic performance. EPA also will have the model peer reviewed, available for public comment and demonstrated in some regulatory analyses. This model will provide critical evidence-based analyses to inform decision making.

- Continue to build a model to assess the benefits of national regulations that change water quality. This effort will provide important evidence-based data and analyses, consistent with economic science best practices to inform decision making.

- Continue to manage EPA's implementation of EOs, including development and management of the annual regulatory budget, analyzing potential areas of cost savings, ensuring EPA continues to meet or exceed the goal of repealing two regulations for each new regulation issued, pursuant to EO 13771, and maintaining a website that provides information about regulatory and deregulatory actions.

- Review economic analyses prepared by EPA to ensure compliance with OMB Circular A-4 on Regulatory Analysis, EO 12866, and other related requirements. Provide the Administrator and the public with high-quality analysis of the costs, benefits, and impacts on jobs, businesses, and communities to better inform decision-making and ensure transparency about the consequences of regulation.[105]

- Continue to work on development of new regulations to support greater consistency and transparency in consideration of economic costs and benefits in the regulatory development process and implementation of Agency programs.

- Continue to work on an updated EPA's Guidelines for Preparing Economic Analyses to our Science Advisory Board for peer review. The updated guidelines will help ensure that analyses provide a complete accounting of the impacts of regulatory actions, including distributional consequences. The guidelines also will help ensure that evidence-based economic analysis will be done consistently across EPA programs and in accordance with best economic methods.

[104] For more information, please see: https://www.federalregister.gov/documents/2019/10/15/2019-22623/promoting-the-rule-of-law-through-improved-agency-guidance-documents.

[105] For more information, please see: https://www.epa.gov/environmental-economics/guidelines-preparing-economic-analyses.

- Apply the best economy-wide modeling tools to assess the economic effects of environmental regulatory options, including methods designed to examine the distribution of regulatory burdens. Work to develop open source data and economic models to analyze impacts of environmental regulations. These updated guidelines will help ensure that evidence-based economic analysis will be done consistently across EPA programs and in accordance with best economic methods.

- Pursuant to EPA's Energy Independence Report under EO 13783, conduct more detailed employment analysis of regulations (both the direct and indirect employment impacts) on a regular basis, including developing information and models to help conduct ex post cumulative assessment.

- Continue to develop EPA's semiannual unified Regulatory Agenda, while ensuring EPA complies with requirements under EO 13771.

- Manage EPA's internal Action Development Process and expand and upgrade regulatory planning and tracking tools to facilitate timely decisions and coordination across programs.

- 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.

- Support EPA's newly appointed Chief Statistical Officer, who will provide technical support and review of projects under EPA's evaluation plan and evidence-based policy agenda; design statistically-sound policy analyses and evaluations, assist in the development of the evaluation plan; and promote culture of evidence-based decision making.

- Lead EPA's implementation of EO 13891, including establishing a new website with links to all EPA guidance documents in effect and the promulgation of a new rule setting forth processes and procedures for issuing guidance documents.

Performance Measure Targets:

(PM RG2) Hours of unnecessary or duplicative reporting burden to the regulated community eliminated.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					2,000,000	2,000,000	2,000,000	2,000,000	Hours
Actual					2,026,627	-5,893,454			

(PM RG3) Number of EO 13771 regulatory actions issued.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					No Target Established	No Target Established	No Target Established	No Target Established	Actions
Actual					3	6			

(PM RG4) Number of EO 13771 deregulatory actions issued.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					No Target Established	No Target Established	No Target Established	No Target Established	Actions
Actual					10	18			

(PM RG5) Total incremental cost of all EO 13771 regulatory and deregulatory actions.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					-40	-50	-2,138	No Target Established	Millions of Dollars
Actual				-22	-75	449			

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$2,787.0) This change is an increase due to the recalculation of base payroll costs.

- (+$1,413.0) This program change increases resources to implement regulatory policy priorities and to assess, review, and improve the Agency's regulations and underlying economic tools in accordance with new Executive Orders.

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).

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$3,154.5***	***$3,214.0***	***$4,031.0***	***$817.0***
Total Budget Authority	$3,154.5	$3,214.0	$4,031.0	$817.0
Total Workyears	14.6	18.7	18.7	0.0

Program Project Description:

Congress established EPA'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 in 1977, 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.[106]

In FY 2019, the SAB produced two consultations and three scientific peer reviews while CASAC produced one consultation and one scientific peer review. SAB topics included a review of assessments of IRIS chemicals and a review of biogenic carbon emissions from stationary sources. The CASAC work was a review of the PM Integrated Science Assessment and a consultation of the ozone Integrated Review Plan. In FY 2019, EPA organized a Lean event focusing on improving efficiency and effectiveness through a proposed cross-cutting measure. The SAB proposed a seven percent reduction in the time it takes to develop reports and proposed to post Federal Advisory Committee Act (FACA) meeting minutes 90 days after the meeting. These actions are intended to increase transparency and public participation.

[106] For more information, please see: http://www.epa.gov/sab/ and http://www.epa.gov/casac/.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in the *FY 2018 - 2022 EPA Strategic Plan*. FY 2021 resource levels are an opportunity for EPA's SAB to reprioritize activities. Authorizing legislation and scientific integrity mandate that each peer review meets certain minimum standards for a successful independent review. In FY 2021, the Program will continue federally mandated CASAC reviews of policy assessments, risk exposure assessments, and health and ecological criteria for primary National Ambient Air Quality Standards. The CASAC expects to conduct two such NAAQS reviews in FY 2021. The SAB also anticipates four reviews of supporting science associated with agency rulemakings in FY 2021, six reviews to accommodate additional requests as made by EPA's Administrator or program, and five reviews to assist the Agency in its review of toxic chemicals under the reformed Toxic Substances Control Act. For FY 2021, the SAB and CASAC will continue focusing on efficiency, increasing transparency and public participation, and expect to complete nine advisory reports.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$970.0) This change is an increase due to the recalculation of base payroll costs.

- (-$153.0) This program change reduces the Science Advisory Board Program by streamlining support for conducting peer reviews and assessing Integrated Risk Information System chemicals. This reduction also incorporates implementation of business process improvements to assure logistical support is provided to help the SAB and CASAC adhere to the provisions of FACA.

Statutory Authority:

Environmental Research, Development, and Demonstration Authorization Act (ERDDAA); Federal Advisory Committee Act (FACA); Clean Air Act (CAA).

Operations and Administration

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$33,799.8***	***$30,945.0***	***$29,621.0***	***-$1,324.0***
Leaking Underground Storage Tanks	$70.2	$163.0	$138.0	-$25.0
Hazardous Substance Superfund	$18,593.2	$20,533.0	$22,982.0	$2,449.0
Total Budget Authority	$52,463.2	$51,641.0	$52,741.0	$1,100.0
Total Workyears	261.2	285.7	259.5	-26.2

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 improvements for acquisition.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, EPA will continue to process contract actions in accordance with Federal Acquisition Regulation (FAR) and guidance from the Office of Management and Budget (OMB) Office of Federal Procurement Policy (OFPP).

Timely procurement processing is crucial to efficient operations. In FY 2019, EPA met its target of 85 percent for procurement action lead times (PALT). The Agency is continuing work toward its long-term performance goal to reduce procurement processing times by achieving 100 percent for PALT by FY 2022. EPA tracks and reviews PALT achievement data on a monthly basis and works with program offices to determine the causes of delays and to improve processing times. As a result of the monthly PALT reviews, EPA has developed additional trainings and resources for the Agency's acquisition community to improve the quality of procurement requests, which is an indicator for the achievement of PALT.

EPA is fully 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:

- The OMB Category Management Cross-Agency Priority (CAP) goal focuses on total acquisition spend transitioned from contract vehicles that are unaligned with category management principles to the Spend Under Management (SUM) program. In FY 2019, to further EPA's ability to meet its FY 2020 Category Management CAP goal, the EPA revised its Acquisition Guidance section 8.0.100, *Requirements for Mandatory Use of Common Contract Solutions* to include the policy mandating the use of enterprise-wide contract vehicles, in addition to BIC contract solutions and other OMB-designated contract solutions. Based on this policy change, EPA anticipates greater than 50 percent of total addressable spend will have been transitioned into the SUM program by the end of FY 2021, relative to the end of FY 2018 result of 26 percent.

- In FY 2021, EPA will continue to implement BIC solutions to identify pre-vetted, government-wide contracts as part of the Agency's effort to utilize more mature, market-proven acquisition vehicles.[107] Through 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.

- In FY 2021, 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 FY 2019, EPA realized a $4.7 million cost avoidance by using data analysis tools to monitor specific, measurable data related to print services, cellular services, shipping, Microsoft software, voice services, office supplies, lab supplies, PCs, and furniture. Since the beginning of the Strategic Sourcing program in FY 2013 through the end of FY 2019, EPA has achieved cost avoidance of $19.4 million. In FY 2021, EPA anticipates approximately $4.3 million in additional savings.

In FY 2021, EPA requests an increase to evaluate options for replacing the EPA Acquisition System (EAS) with an approved government-wide Federal Shared Service Provider (FSSP) for a contract writing system. This investment will support the Agency's long-term performance goal in the *FY 2018 – 2022 EPA Strategic Plan* to increase the adoption of shared services by September 30, 2022. It also is in line with OMB-17-22 "Comprehensive Plan for Reforming the Federal Government,"[108] OMB-19-16 "Centralized Mission Support Capabilities for the Federal Government,"[109] and the President's Management Agenda CAP Goal 5: Sharing Quality

[107] For additional information, please refer to: https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2017/M-17-29.pdf *Best-in-Class Mandatory Solution -Package Delivery Services.*
[108] For more information, please visit: https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2017/M-17-22.pdf.
[109] For more information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2019/04/M-19-16.pdf.

Services.[110] The Agency is focusing on a 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.

In FY 2021, EPA will continue to focus on implementing the Financial Information Technology Acquisition Reform Act (FITARA) 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:

(PM PR1) Percentage of contract actions processed within the Procurement Action Lead Time (PALT) Standards.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					SA: 75 CP: 65 FAA: 80	85	90	95	Percent
Actual					SA: 70 CP: 88 FAA: 76	85			
Numerator					SA: 204 CP: 21 FAA: 3,038	9,269			Actions
Denominator					SA: 1,007 CP: 24 FAA: 4,002	10,906			

Work under this program also supports performance results in the Central Planning, Budgeting and Finance Program under the EPM appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$850.0) This change is an increase due to the recalculation of base payroll costs.
- (+$400.0) This program change is an increase to support planning for the migration to a Federal Shared Service Provider contract writing system.
- (-$2,574.0 / -11.2 FTE) This program change streamlines contractor support for: helpdesk services for EPA's Acquisition System; the closeout of contracts; and the Defense Contract Management Agency for Audit Services and the Virtual Acquisition Office (a source for up-to-date government acquisition news, research, and analysis). It also proposes to eliminate funding for Contracts Management Assessment Program Reviews, which enable

[110] For more information, please visit: https://www.whitehouse.gov/wp-content/uploads/2018/03/Presidents-Management-Agenda.pdf.

EPA to self-identify and remedy internal weaknesses, and reduces the Agency's training for its acquisition community.

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).

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$72,920.6***	***$71,423.0***	***$76,603.0***	***$5,180.0***
Leaking Underground Storage Tanks	$258.3	$321.0	$450.0	$129.0
Hazardous Substance Superfund	$23,772.7	$21,971.0	$22,462.0	$491.0
Total Budget Authority	$96,951.6	$93,715.0	$99,515.0	$5,800.0
Total Workyears	421.4	456.0	435.3	-20.7

Total workyears in FY 2021 include 1.0 FTE funded by TSCA fees and 1.0 FTE funded by e-Manifest fees.
Total workyears in FY 2021 include 39.0 FTE to support Central Planning, Budgeting, and Finance working capital fund (WCF) services.

Program Project Description:

Activities under the Central Planning, Budgeting, and Finance Program support the management of integrated planning, budgeting, financial management, performance measurement, 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; 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; the Digital Accountability and Transparency (DATA) Act of 2014; the Federal Information Technology Acquisition Reform Act (FITARA) of 2015; the Federal Management Financial Integrity Act; the Inspector General Act of 1978, as Amended; and the Foundations for Evidence-Based Policymaking Act of 2018.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. 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. EPA will sustain basic operations and maintenance of core agency financial management systems: Compass, PeoplePlus (Time and Attendance), Budget

Formulation System (including a new Performance Module), and related financial reporting systems. In line with the President's Management Agenda, the Agency is reviewing its financial systems for modernization opportunities to support greater efficiencies and effectiveness and targeting legacy systems for replacement.

EPA will continue to modernize and streamline business processes and operations to promote transparency and efficiency. The Program will apply Lean principles and leverage input from customer-focused councils, advisory groups, and technical workgroups to continue improving as a high-performance organization. EPA will standardize and streamline internal business processes and use additional federal and/or internal shared services when supported by business case analysis. The requested resources directly support the long-term performance goal in the *FY 2018 – 2022 EPA Strategic Plan*: By September 30, 2022, increase enterprise adoption of shared services by four.

During FY 2021, EPA will focus on implementation of G-Invoicing, Treasury's Interagency Agreement system. G-Invoicing will integrate into the Agency's accounting system as part of a governmentwide effort to standardize and improve financial management. For EPA, this will involve implementing new versions of the accounting systems software in FY 2020 and FY 2021. Extensive testing and training will be needed.

The goal of G-Invoicing is to align EPA's business processes to deliver the new, more streamlined approach for the end-to-end delivery of financial transactions for IAs. Over the next several years, other federal shared services are planned that will impact financial transactions, and EPA will be working to integrate upcoming new contracts systems. Among other benefits, EPA seeks to adopt accepted and standardized business processes that will deliver greater streamlining and efficiency and achieve improved financial and programmatic oversight. Equally important is the ability to meet increased transparency needs, such as those prescribed in the DATA Act, as well as increased compliance and reporting standards.

In FY 2021, EPA will continue to develop a Central Evaluation Office to advance the goals of the Foundations for Evidence-Based Policymaking Act. Key responsibilities include developing the Agency's learning agenda and evaluation plans that enhance strategic and annual planning. EPA will systematically identify the most important evidence the Agency needs to gather and generate to advance its goals and ensure use of high-quality data, evaluation results, and other information to inform EPA's policy and decision-making. EPA will strengthen its capacity to assess and make strategic investments in data, data quality, evaluation, and other evidence-building activities at an enterprise level.

In FY 2021, the Program will continue to focus on core responsibilities in the areas of strategic planning, performance measurement, assessment and reporting, and 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 regular Performance Reviews 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.

EPA will continue to follow OMB Circular A-123 guidance, conduct internal control program reviews, and use the results and recommendations from the Office of Inspector General (OIG) 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, since FY 2018, through extensive employee outreach and improved communication with human resources, EPA reduced the number of payroll payments made outside of the normal payroll process by 92 percent. EPA also uses its major systems' help desk ticket data to evaluate ticket durations, urgent ticket responses, ticket escalations, and customer experience to determine potential improvements and best practices. In addition, EPA is dedicated to reducing fraud, waste, and abuse, and strengthening internal controls over improper payments. Since the implementation of the Improper Payments Information Act of 2002, EPA has continually reviewed, sampled, and monitored its payments to protect against erroneous payments and complied with reporting requirements.

The Program will continue to support FITARA requirements in accordance with EPA's Implementation Plan.[111] The Chief Information Officer will continue to be engaged throughout the budget planning process to ensure that IT needs are properly planned and resourced in accordance with FITARA.

Performance Measure Targets:

(PM CF1) Number of administrative shared services.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					6	7	8	10	Shared Services
Actual	4	4	4	4	4	7			

(PM CF2) Number of Agency administrative subsystems.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					24	22	22	21	Subsystems
Actual				29	29	29			

Work supporting performance results under this program also can be found in the Facilities Infrastructure and Operations Program under the EPM appropriation and the Human Resources Management Program under the EPM appropriation.

[111] For more information please see: http://www.epa.gov/open/fitara-implementation-plan-and-chief-information-officer-assignment-plan.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$1,040.0) This change is an increase due to recalculation of base payroll costs.

- (+$1,983.0 / 2.0 FTE) This program change is to support the work of a new Central Evaluation Office in OCFO with the purpose of coordinating and implementing the requirements of the Foundations for Evidence-Based Policymaking Act.

- (+$2,157.0 / -11.2 FTE) This net program change is an increase to support the implementation of G-Invoicing (+$1,348.0) and other Financial Management Payment Processing Modernization (+$1,150.0) efforts including upgrading, testing, and integrating with the Agency's current accounting systems, offset from savings from the retirement of legacy financial systems; streamlining efforts in the areas of budget preparation, financial reporting, and transaction processing; and efficiencies that reduce need for staffing.

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).

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$321,500.4***	***$287,595.0***	***$317,345.0***	***$29,750.0***
Science & Technology	$67,856.9	$65,372.0	$67,908.0	$2,536.0
Building and Facilities	$23,017.8	$26,922.0	$33,377.0	$6,455.0
Leaking Underground Storage Tanks	$847.2	$868.0	$796.0	-$72.0
Inland Oil Spill Programs	$577.3	$665.0	$682.0	$17.0
Hazardous Substance Superfund	$82,243.2	$76,473.0	$76,831.0	$358.0
Total Budget Authority	$496,042.8	$457,895.0	$496,939.0	$39,044.0
Total Workyears	329.9	315.4	307.6	-7.8

Total workyears in FY 2021 include 2.1 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.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, 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,[112] the *Federal Assets Sale and Transfer Act of 2016*. EPA is implementing a long-term space consolidation plan that will reduce the number of occupied facilities, consolidate space within remaining facilities, and reduce square footage wherever practical. EPA also will continue to work to enhance its federal infrastructure and operations in a manner that increases efficiency.[113]

[112] For additional information, please refer to: https://www.congress.gov/bill/114th-congress/house-bill/4465, *Federal Assets Sale and Transfer Act of 2016*.
[113] For additional information, please refer to: https://www.whitehouse.gov/presidential-actions/executive-order-regarding-efficient-federal-operations/, Executive Order 13834 "Efficient Federal Operations". For information on EPA's FY 2018

EPA is working toward the long-term performance goal in the *FY 2018 – 2022 EPA Strategic Plan* to reduce unused office and warehouse space by 850,641 square feet nationwide by September 30, 2022. This has the potential to provide a cumulative annual rent avoidance of approximately $28 million across all appropriations. This will help offset EPA's escalating rent and security costs. In FY 2019, EPA released 128,150 square feet of unused office and warehouse space. Planned consolidations in FY 2021 will allow EPA to release an expected 319,693 square feet of space. For FY 2021, the Agency is requesting $167.27 million for rent, $8.89 million for utilities, and $28.96 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.

In FY 2021, the Agency will take aggressive action to reconfigure EPA's workplaces with the goal of reducing long-term rent costs. Space consolidation and 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 Buildings and Facilities funding to achieve long-term cost avoidance.

EPA will continue to manage lease agreements with GSA and private landlords, and maintain EPA facilities, fleet, equipment, and fund costs associated with utilities and building security needs. 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.

In addition, the Agency will continue to utilize GSA's Managed Service Office, *USAccess*, for PIV card enrollment and issuance. *USAccess* is a shared services solution which is in line with OMB's Federal IT Shared Services Strategy and the President's Management Agenda.[114]

Performance Measure Targets:

(PM FA1) Reduction in EPA Space (sq. ft. owned and leased).

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					241,000	163,626	100,821	319,693	Square Feet
Actual					149,278	128,150			

Work under this program also supports performance results in the Central Planning, Budgeting and Finance Program under the EPM appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$3,362.0) This change is an increase due to the recalculation of base payroll costs.
- (+$8,665.0) This net change to fixed and other costs is an increase due to the recalculation of rent, utilities, security, and transit subsidy.

performance for efficient Federal operations/management, please visit: https://www.sustainability.gov/images/scorecards/epa-scorecard-fy2018.png.

[114] For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2018/03/Presidents-Management-Agenda.pdf.

- (+$17,723.0 / -2.2 FTE) This net program change increases support for moves and space reconfiguration. Funds will allow the Agency to release space in Regions 3, 6, 9 and headquarters and is necessary for the EPA to operate within the appropriation levels in the President's Budget.

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).

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$23,794.8***	***$23,802.0***	***$21,452.0***	***-$2,350.0***
Hazardous Substance Superfund	$2,517.7	$2,580.0	$2,903.0	$323.0
Total Budget Authority	$26,312.5	$26,382.0	$24,355.0	-$2,027.0
Total Workyears	129.9	139.5	115.7	-23.8

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, and suspension and debarment activities. Grants comprise approximately 40 percent of EPA's overall budget. Resources in this program ensure that EPA's management of grants and IAs meet the highest fiduciary standards, that the grant and IA funding produces measurable results for environmental programs, and that the suspension and debarment program effectively protects the government's business interest.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. Accordingly, EPA will continue to implement activities to achieve efficiencies while enhancing quality and accountability. In FY 2021, EPA will continue investments in modernizing grant and IA information technology/information management (IT/DM) systems in support of the President's Management Agenda.[115]

Work in this program supports the long-term performance goal in the *FY 2018 – 2022 EPA Strategic Plan*: By September 30, 2022, increase enterprise adoption of shared services by four. The Agency will complete activities to align its IA business processes to ensure compatibility with the government-wide mandate to adopt G-Invoicing by June 2021.

In FY 2021, additional resources are requested for the Agency to complete the deployment of EPA's Next Generation Grants System (NGGS) and to retire outdated legacy grants management system. The transition to NGGS has a relatively low deployment time and will require fewer training resources as the system is based on legacy grant system infrastructure already familiar to staff. NGGS relies on a flexible platform that will enable it to adapt to changing technology and

[115] For more information, please visit: https://www.whitehouse.gov/wp-content/uploads/2018/03/Presidents-Management-Agenda.pdf.

business processes and will allow it to easily integrate with other agency systems. Prior to moving forward with the development of NGGS, EPA researched available federal shared service providers for grants systems and was unable to identify an existing solution that would enable the Agency to fulfill its fiduciary responsibilities, and ensure proper accountability, oversight, controls, reporting capability and financial stewardship, of EPA grants.

EPA will continue to focus on reducing the administrative burden on EPA and grants recipients and on improving grants management procedures by: 1) streamlining EPA's grants management policies through a new comprehensive framework to guide policy development, implementation, compliance, and review; 2) using EPA's Lean Management System to refine grants management processes; and 3) moving to a risk-based method of pre- and post-award monitoring for grants to more effectively ensure compliance and also reduce burden.

The Agency will continue to make use of discretionary debarments and suspensions as well as statutory debarments under the Clean Air Act and Clean Water Act to protect the government's business interests. In FY 2021, EPA will focus suspension and debarment activity on the most egregious violations. 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 non-procurement awards (for example: grants, cooperative agreements, loans, and loan guarantees). A number of recent federal statutes, GAO reports, and OMB directives require that federal agencies administer effective suspension and debarment programs to protect the public's interest and the integrity of federal programs.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$1,471.0) This change is an increase due to recalculation of base payroll costs.

- (-$4,221.0 / -21.4 FTE) This program change is a decrease based on the Agency's shift to focus on core grants management operations, which include pre-award reviews; post-award monitoring; compliance; administrative advanced monitoring reviews; management effectiveness reviews; baseline monitoring; and audit follow-up activities on the highest risk awards.

- (+$400.0) This program change is an investment to support migration to a new grants administration management system and to retire outdated legacy software.

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.

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$43,339.9***	***$41,556.0***	***$44,538.0***	***$2,982.0***
Hazardous Substance Superfund	$6,163.7	$6,548.0	$5,704.0	-$844.0
Total Budget Authority	$49,503.6	$48,104.0	$50,242.0	$2,138.0
Total Workyears	201.4	228.2	223.0	-5.2

Program Project Description:

Environmental Programs and Management (EPM) resources for the Human Resources (HR) Management Program support human capital (HC) activities throughout EPA. To help achieve its mission and maximize employee productivity and job satisfaction, EPA continually works to improve business processes for critical HC functions including recruitment, hiring, employee development, performance management, leadership development and workforce planning. 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. Effective workforce management is critical to EPA's ability to accomplish its mission. EPA's efforts in HC functions are focused on sustaining the workforce, retaining critical expertise, and capturing institutional knowledge. The Agency is developing and deploying management tools to assist EPA in ensuring the right staff with the appropriate skills are placed in the most suitable positions. These tools also will be valuable as an increasing percentage of the workforce becomes retirement eligible. Currently, 25 percent of EPA's workforce is retirement eligible, increasing to an estimated 50 percent over the next five years. EPA will continue to support efforts to maintain the high-quality of core operations, improve efficiencies and achieve greater effectiveness in mission support functions including HC management.

In FY 2021, the Agency will continue to build upon its performance, learning, and succession management activities. EPA will maintain and operate *FedTalent*, a talent management system provided through the Department of Interior (DOI)'s Interior Business Center (IBC). *FedTalent* serves as a valuable tool to assist with developing, delivering, and tracking high-impact training. EPA will continue to migrate and consolidate training data from more than 15 disparate training

repositories to ensure *FedTalent* is a one-stop-shop for all training needs. Additionally, the Agency is planning to procure and deploy a performance management system to move from paper to an automated process for the start of FY 2021.

In FY 2021, EPA will continue to maintain and operate three other recent workforce planning tools – the Mission Critical Occupations dashboard (to be fully launched in FY 2020) and the Workforce Demographics and Diversity dashboards (both fully deployed and in place). These dashboards provide data visualizations and easy-to-understand information about the current workforce and are essential for succession planning and management because they afford managers a strategic view of retirement eligibility, diversity information, occupational series, and grade levels, as well as the ability to drill down and access data at lower organizational levels. The dashboards assist EPA with succession planning by helping identify workforce gaps due to anticipated retirements and attrition trends.

The Agency will continue the development and piloting of its Talent Enterprise Diagnostics (TED) tool in FY 2020, which advances human capital priorities by enhancing EPA's ability to make strategic workforce decisions. In FY 2021, TED data will continue to serve a crucial role in EPA's Workforce Planning and Succession Management process to identify potential competency gaps across the Agency and to increase management's understanding of where needed skill sets reside within EPA.

EPA is working to develop and maintain a high-caliber and modern information technology (IT) and security workforce though direct hiring authority (DHA) granted by 5 CFR § 337[116] for IT positions. This authority allows EPA to recruit highly skilled candidates in very technical areas of work without regard to the provisions of Title 5. The Agency hired 23 IT specialists leveraging this authority in FY 2019. EPA will continue to leverage the use of the DHA across IT specialist occupation categories in FY 2020 and FY 2021.

EPA will continue to focus on delivering statutorily required services associated with the Employee Counseling Assistance Program, the Federal Worker's Compensation Program, the Drug-free Workplace Program, Unemployment Compensation, and Sign Language Interpreting and Captioning services. Furthermore, the Agency will continue its focus on Labor and Employee Relations (LER) by administering and/or negotiating national labor agreements and providing advice, guidance, and assistance to regional and local level negotiations. EPA also will continue its efforts to strengthen managers' and supervisors' institutional knowledge on LER related matters through training and outreach; provide advisory and counseling support agencywide; and conduct analysis of HC information to assist managers and supervisors.

The Agency is strengthening and improving its HR accountability program through internal assessments with the Office of Personnel Management's HRStat framework. With a focus on efficient, effective, and accountable systems, EPA is meeting all regulatory requirements and looks for opportunities for continuous improvement.

[116] For more information, please refer to: https://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&sid=1b430a73f84957c9f1af2dee2ff9d0d5&rgn=div5&view=text&node=5:1.0.1.2.48&idno=5#5:1.0.1.2.48.2.16.1.

EPA has reconstituted an intern program to address the expected retirement wave. The Green Intern program introduces participants to core mission work. This program is supported by formal coaching and training programs aimed at sustaining the workforce, expanding professional development opportunities, and increasing employee productivity. The first intern class began onboarding at the start of FY 2020. EPA also has expanded its outreach to new potential sources for future employees. Specifically, EPA reestablished connections with the Washington Center to bring on rising college seniors to experience working at the Agency; signed a Memo of Understanding with the Society of Hispanic Professional Engineers for promoting a diverse workforce; and initiated participation in the President Management Council's Interagency Rotational Program to create leadership development assignments for GS 13-15 level employees.

The Agency is actively involved with OPM's Chief Human Capital Officer Council and the President's Management Council's Agenda to address the challenges of the 21st Century federal workforce. EPA will continue to collaborate in these forums to maximize the value these communities add to important government-wide issues. FY 2021 priorities include workforce planning, succession planning, and employee engagement. The EPA Workforce Plan is being updated using the dashboards and the TED tool mentioned previously. Succession planning is taking the form of outreach to potential leaders through expanded partnerships. EPA is building on current employee engagement efforts through its Engagement Community of Practice and the creation of an Engagement Officer position.

In FY 2021, EPA's Human Resources Shared Service Centers (HRSSC) in Cincinnati, Ohio and Research Triangle Park, North Carolina will continue to manage recruitment; employee relations and advisory services; develop, implement, and enhance training and employee orientation programs; and provide management guidance on workforce planning and personnel policies. Additionally, the HRSSCs will continue to coordinate and deliver a comprehensive human resource management program. Other specific functions of the HRSSCs encompass employee benefits, retirement counseling, career development, performance management, personnel actions, and quality of life issues.

EPA's advisory committees, which operate as a catalyst 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. The Agency will continue its ongoing efforts to modernize the advisory committee administrative processes by implementing an electronic committee membership nomination and appointment process to improve operational efficiency, effectiveness, accuracy, and timeliness.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

FY 2021 Change from Estimated the FY 2020 Enacted Budget (Dollars in Thousands):

- (+$4,221.0) This change is an increase due to the recalculation of base payroll costs.

- (-$1,239.0 / -5.2 FTE) This net program change reduces funding for: operational support for HR programs being utilized agencywide including the Agency's recruitment and diversity and inclusion activities, EPA's Human Resources Council and National Partnership Council, the Leave Bank, and the Workplace Solutions; enhancements and maintenance of EPA's HR IT Systems including HR Line of Business, data management and analysis, troubleshooting, and change requests; support for Federal Advisory Committees not mandated by statute; and centrally-provided, non-mandatory training.

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: Greater Certainty, Compliance, and Effectiveness
Objective(s): Prioritize Robust Science

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$1,823.4***	***$1,605.0***	***$0.0***	***-$1,605.0***
Total Budget Authority	$1,823.4	$1,605.0	$0.0	-$1,605.0
Total Workyears	5.9	4.6	0.0	-4.6

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. In addition, the Science Policy and Biotechnology Program provides for independent, external scientific peer review through the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel, a federal advisory committee, and the newly-formed Science Advisory Committee on Chemicals.

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021. Statutory requirements will be absorbed by the pesticides and toxics programs.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$1,605.0 / -4.6 FTE) This program change eliminates the Science Policy and Biotechnology Program. The science advisory committee oversight, including peer review, required by FIFRA and the Toxic Substances Control Act, will be conducted by the pesticides and toxics program offices.

Statutory Authority:

Federal Insecticide Fungicide and Rodenticide Act (FIFRA); Federal Food, Drug and Cosmetics Act (FFDCA) § 408; Toxic Substances Control Act (TSCA).

Pesticides: Protect Human Health from Pesticide Risk

Program Area: Pesticides Licensing
Goal: A Cleaner, Healthier Environment
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$55,368.2***	***$58,753.0***	***$51,268.0***	***-$7,485.0***
Science & Technology	$3,098.5	$3,154.0	$2,443.0	-$711.0
Total Budget Authority	$58,466.7	$61,907.0	$53,711.0	-$8,196.0
Total Workyears	366.4	387.6	416.5	28.9

Total program workyears in FY 2021 include 126.0 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

Program Project Description:

Under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)[117] 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),[118] 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 United States. 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 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.[119] EPA must periodically review the registration and tolerances that the Agency issues to ensure that the public health is adequately protected.

[117] For additional information on FIFRA, please visit: https://www.epa.gov/laws-regulations/summary-federal-insecticide-fungicide-and-rodenticide-act.
[118] On Friday, March 8, 2019, the President signed into law 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 Federal Insecticide, Fungicide, and Rodenticide Act.
[119] 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.4 Ensure Safety of Chemicals in the Marketplace in the *FY 2018 - 2022 EPA Strategic Plan*.

Pesticide Review and Registration

In FY 2021, EPA will continue to review and register new pesticides, new uses for existing pesticides, and other registration requests in accordance with statutory requirements. In addition, the Agency will be evaluating pesticides that are already in the market against current scientific standards for human health. To further advance EPA's work supporting environmental justice and children's health, EPA will process these registration requests with special consideration for susceptible populations, especially 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 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), 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 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 available on the website and in print.

In FY 2021, EPA also will continue to review the registrations of existing pesticides with a focus on assessing and ensuring that pesticides can continue to be 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 it continues to meet the FIFRA standard for registration.[120] For pesticides registered before October 1, 2007, EPA has a statutory mandate to make registration review decisions by October 1, 2022. There is a total of 725 such cases. For each case, the steps in this process include, in this order, opening dockets, developing work plans, completing risk assessments, and making decisions regarding any risk management measures. EPA completed the opening of all 725 dockets in FY 2017 and will focus its resources on completing risk assessments and making decisions to meet the FY 2022 statutory deadline. As of the end of FY 2019, 383 final decisions of a known universe of 725 cases were completed and 546 draft risk assessments of a known universe of 725 cases were completed. In working towards meeting the FY 2022 deadline for registration review, EPA expects to complete approximately 85 draft risk assessments and 110 decisions during FY 2021. The draft risk assessments will be published for public comments.

In FY 2021, EPA will continue enhancements to the Pesticide Registration Information System (PRISM). Expanding the capabilities of PRISM via further inclusion of electronic processes 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

[120] *See*, the EPA Pesticide Registration Internet site, found at: https://www.epa.gov/pesticide-registration.

to electronically store associated data as they relate to regulatory decisions and scientific information. Overall, the Agency projects that by expanding PRISM and related projects, over 150 existing business process workflows supporting the implementation of PRIA will be improved.

Reducing Pesticide Risks to People through the Registration of Lower Risk Pesticides

In FY 2021, 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).[121]

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 in FY 2021, 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. Protecting workers from potential effects of pesticides is an important role of the Pesticide Program. Workers in several occupations 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.

The Worker Protection Standard (WPS)[122] and the Certification of Pesticide Applicators rules finalized in FY 2015 and FY 2017, respectively, are key elements of EPA's strategy for reducing occupational exposure to pesticides. In FY 2021, EPA will continue to provide extensive in-person training to state regulators and inspectors and regions on the revised regulations to ensure accurate implementation and protection of America's workforce.

Through this program, EPA also will continue outreach and training to healthcare providers in the recognition and management of pesticide-related illnesses. The outreach focuses on efforts to train clinicians serving the migrant and seasonal farmworker community, further improving the treatment of agricultural workers and communities potentially exposed to pesticides.

Preventing Disease through Public Health Pesticides: Antimicrobial Testing

Antimicrobial pesticides play an important role in public health and safety by killing germs, bacteria, viruses, fungi, protozoa, algae, and slime. Some of these products are used to sterilize hard surfaces in hospitals. Chemical disinfection of hard, non-porous surfaces, such as floors, bed

[121] *See*, the EPA Overview of Risk Assessment in the Pesticide Program Internet site, found at: https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/overview-risk-assessment-pesticide-program. *See also*, EPA's IPM website, found at: https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles#for_more-information.

[122] For additional information, please visit: https://www.epa.gov/pesticide-worker-safety/agricultural-worker-protection-standard-wps.

rails, and tables is one component of the infection control systems in hospitals, food processing operations, and other places where disease-causing microorganisms, such as bacteria and viruses, may be present. In reviewing registrations for antimicrobials, EPA is required to ensure that antimicrobials maintain their effectiveness.[123]

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 currently in the process of developing a new risk-based testing strategy in response to EPA Office of the Inspector General recommendations made in FY 2016.[124] Consistent with 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 2022.

Outreach and Education

Giving priority to reduced risk and Integrated Pest Management (IPM)-friendly pesticides are two steps toward protecting human health. It is essential for people using pesticides to be well informed, to understand the importance of reading and following label directions, and the importance of proper disposal. They also need to understand how to protect themselves from pests that can transmit disease. In FY 2021, the Pesticide Program will continue to invest in environmental education and training efforts for growers, pesticide applicators, and workers, as well as the public in general.

Reducing Animal Testing

In FY 2021, the Agency will continue to utilize its guiding principles on data needs[125] to ensure that the Agency has enough information to support strong regulatory decisions to protect human health, while reducing, and eliminating in some cases, 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 -- 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 in the cost of conducting the studies. In addition, the Agency has continued to develop and implement 21st century toxicology and exposure methods, including the use of computer-modeling and in vitro testing techniques, to advance more efficient and effective human health risk assessments that support sound, risk-based, regulatory decision-making.

[123] *See*, FIFRA section 3(h)(3), 7 U.S.C. 136a(h)(3).
[124] For additional information, please see: https://www.epa.gov/pesticide-registration/antimicrobial-testing-program.
[125] Additional information on reducing animal testing may be found at: https://www.epa.gov/pesticides/new-epa-guidance-testing-pesticides-will-reduce-animal-testing.

Evidence and Evaluation

EPA will continue, through EPA's Lean Management System (ELMS), to improve the review process for pesticide new active ingredient applications by reducing the timeframes to review these types of applications. In FY 2021, EPA will gather additional evidence, building on continuous efforts to map the process, use data visualization techniques, engage in enhanced collaboration activities, and identify and address bottlenecks. The Agency expects to reduce decision timeframes for new active ingredient applications, improve on-time percentages, and leverage those improvements for other related processes (e.g., new uses).

In FY 2019, EPA completed reviews of over 2,000 PRIA registration actions, with 97.6 percent of those actions being completed on or before PRIA negotiated due dates; registered 14 new pesticide active ingredients; published 85 pesticide draft risk assessments and 80 final/interim decisions for existing pesticides. In FY 2019, EPA took an average of 686 days to complete PRIA decisions, 55 days above the target of 631. Contributing factors included: (1) three of the 14 completions had longer statutory timeframes; (2) the total number of new active ingredient completions in FY 2019 was somewhat lower than normal; and (3) 12 of the 14 completions required renegotiation of the PRIA due date, which itself adds time to the overall process. The average exceedance of PRIA decision timeframes for new active ingredients (due to renegotiation) is 182 days which was significantly better than the FY 2019 target of 284 days. Reasons for the renegotiation of the PRIA due date in FY 2019 included: deficient applications; additional studies required; risk mitigation issues; public participation process; and the Federal Register Notice publication process.

As part of EPA's long-term commitment to ensure the effective advancement of the chemicals safety program to protect human health and the environment from potential risks of pesticides and toxic chemicals, the Agency's Office of Chemical Safety and Pollution Prevention will establish a presence in Research Triangle Park (RTP), North Carolina. Positions in RTP will be filled competitively and will not involve reassignments or involuntary moves, and the effort will utilize existing EPA space and resources. Establishing a presence in RTP is expected to improve recruitment of scientific staff and increase capacity to meet OCSPP's statutory and regulatory milestones under FIFRA, FQPA, ESA, and associated statutes.

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 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$4,763.0) This change is an increase due to the recalculation of base payroll costs.

- (-$12,248.0 / -13.0 FTE) This net program change is a reduction in funding for pesticide program activities from annual appropriations by increasing utilization of pesticide user fee collections.

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: A Cleaner, Healthier Environment
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$39,444.2***	***$38,966.0***	***$32,100.0***	***-$6,866.0***
Science & Technology	$2,415.8	$2,327.0	$2,616.0	$289.0
Total Budget Authority	$41,860.0	$41,293.0	$34,716.0	-$6,577.0
Total Workyears	295.3	249.6	268.4	18.8

Total program workyears in FY 2021 include 85.0 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

Program Project Description:

The Federal Insecticide, Fungicide, and Rodenticide Act (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. The goal of this program is to protect the environment from the potential risks posed by pesticide use. 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.

In addition to FIFRA responsibilities, the Agency has distinct obligations under the Endangered Species Act (ESA).[126] These obligations include ensuring that pesticide regulatory decisions also 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.4 Ensure Safety of Chemicals in the Marketplace in the *FY 2018 - 2022 EPA Strategic Plan*.

Assessing the Risks Pesticides Pose to the Environment

To accomplish the goals set out in the FIFRA and ESA statutes, in FY 2021, EPA will continue to conduct ecological risk assessments[127] to determine what risks are posed by each pesticide to

[126] For additional information, please visit: https://www.epa.gov/endangered-species.
[127] For additional information, please visit: https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/factsheet-ecological-risk-assessment-pesticides.

plants, animals, and ecosystems that are not the targets of the pesticide and whether changes are necessary to protect the environment. EPA has extensive authority to require the submission of data to support its scientific decisions and uses the latest scientific methods to conduct these ecological risk assessments. The Agency requires applicants for pesticide registration to conduct and submit a wide range of environmental laboratory and field studies. These studies examine the ecological effects or toxicity of a pesticide and its breakdown products on various terrestrial and aquatic animals and plants, and the chemical fate and transport of the pesticide (how it behaves and where it enters the soil, air, and water). EPA uses these and other data to prepare an environmental fate assessment and a hazard, or ecological effects, assessment that interprets the relevant toxicity information for the pesticide and its degradation products.[128]

In FY 2021, EPA will continue to examine all toxicity and environmental fate data submitted with each new pesticide registration application to determine what risks the new active ingredient may pose to the environment. When complex scientific issues arise, the Agency consults the FIFRA Scientific Advisory Panel[129] for independent scientific advice.

Risk Mitigation

To ensure unreasonable risks are avoided, EPA may impose risk mitigation measures such as modifying use rates or application methods, restricting uses, or denying uses. In some regulatory decisions, EPA may determine that uncertainties in the risk determination need to be reduced and may subsequently require monitoring of environmental conditions, such as effects on water sources, or the development and submission of additional laboratory or field study data by the pesticide registrant.

Ensuring Proper Pesticide Use through Labeling

Under FIFRA, it is illegal to use a registered pesticide in a manner inconsistent with the label instructions and precautions. In FY 2021, 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. When EPA registers a pesticide product, it requires specific labeling instructions and precautions. When risks are identified during the initial registration or during registration review, the Agency may mitigate those risks by requiring label changes. For example, EPA may require buffer zones around water sources to prevent contamination of water or endangering aquatic plants and wildlife. Other examples are changing the application method, or rate or timing of applications to when pollinators are not present to prevent risks to pollinators such as bees.

Pesticide Registration Review

In FY 2021, EPA's activities will involve increased efforts on comprehensive risk assessments to protect the environment. For the 725 cases covering all pesticides registered before October 1, 2007, EPA has a statutory mandate to make registration review decisions by October 1, 2022. For

[128] Additional information may be found at: https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/overview-risk-assessment-pesticide-program.
[129] For additional information, please visit: http://www.epa.gov/scipoly/sap.

each case, the steps in this process include, in this order: opening dockets, developing work plans, completing risk assessments, and making decisions regarding any risk management measures. EPA completed the opening of all 725 dockets in FY 2017 and will focus its resources on completing risk assessments and making decisions to meet the FY 2022 statutory deadline. As of the end of FY 2019, 383 final decisions of a known universe of 725 cases were completed and 546 draft risk assessments of a known universe of 725 cases were completed. In working towards meeting the FY 2022 deadline for registration review, EPA expects to complete approximately 85 draft risk assessments and 110 decisions during FY 2021. The draft risk assessments will be published for public comments.

Pesticide Registration and Reducing Risk Through the Use of Safer Pesticides and Methods

The review of pesticides currently in the marketplace and implementation of decisions made as a result of these reviews are a necessary element of meeting EPA's goals. However, attaining risk reduction would be significantly hampered without availability of alternative products to these pesticides for consumers.[130] Consequently, the success of the Registration Program in ensuring the availability of reduced risk pesticides plays a significant role in meeting the environmental outcome of improved ecosystem protection. 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).[131] Biological pesticides and biotechnology often represent lower risk solutions to pest problems. In FY 2021, EPA will continue to assist pesticide users in learning about new, safer products as well as safer methods for using existing products. The Agency also will continue encouraging the use of IPM tools.

Reducing Animal Testing

In FY 2021, 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 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.

In FY 2021, EPA will continue its efforts for alternative methods to whole animal toxicity testing for characterizing the effects of pesticide active ingredients on terrestrial and aquatic vertebrates. EPA will continue the current partnership with the National Toxicology Program Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM). A focus 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 for reducing the number of tested species of fish used to characterize acute effects for

[130] For additional information on pesticide risk, please visit: https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/overview-risk-assessment-pesticide-program.
[131] For additional information on IPM, please visit: https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles.

the taxa. The effort is expected to coincide with EPA's collaboration 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 speeding the acceptance process.

With the successful completion of methods development for acute mammal and fish toxicity estimation efforts as well as the 2020 completion of subacute dietary study waiver guidance, EPA also will be embarking on projects to evaluate the feasibility of reducing the number of avian reproduction study species (currently the routing data requirement is testing for two species) and fish life cycle tests (currently testing for freshwater and estuarine species is a frequent occurrence). The goal would be to reduce the number of tested species, yet still provide for appropriately protective terrestrial and aquatic organism risk assessments.

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 the impacts on the environment. The Agency will develop and disseminate brochures, provide education on potential benefits of IPM, and promote outreach on the success of IPM to encourage its use.[132] To encourage responsible pesticide use that does not endanger the environment, EPA will reach out to the public through the Internet, and to workers and professional pesticide applicators through worker training programs.

Protection of Endangered Species

EPA is responsible for complying with the Endangered Species Act (ESA). 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 – and over 1,600 listed endangered species in the U.S. with diverse biological attributes, habitat requirements, and geographic ranges.[133] In FY 2021, as part of EPA's determination of whether a pesticide product may be registered for a particular use, the Agency will assess whether listed endangered or threatened species or their designated critical habitat may be affected by use of the product. Where risks are identified, EPA will work with the Services in a consultation[134] process to ensure these new or existing pesticide registrations also will meet the ESA standard.[135]

During registration review, EPA will support obtaining risk mitigation earlier in the process by encouraging registrants to agree to changes in uses and applications of a pesticide that are beneficial to the protection of endangered species prior to completion of EPA's consultations with the Services. In FY 2021, pesticide registration reviews are expected to contain environmental

[132] For additional information, please visit: https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles.
[133] For additional information, please visit: https://ecos.fws.gov/ecp0/reports/box-score-report.
[134] For additional information, please visit: https://www.epa.gov/endangered-species/assessing-pesticides-under-endangered-species-act.
[135] Additional information on how EPA protects endangered species from pesticides can be found at: https://www.epa.gov/endangered-species.

assessments, including determining potential endangered species impacts. This effort will continue to expand the Program's workload due to the need to review studies that were received as a result of data call-ins and the need to conduct additional environmental assessments for pesticides already in the review pipeline.

In FY 2021, in cooperation with the Services and the U.S. Department of Agriculture (USDA), the Agency will continue to work on implementing the ESA. To this end, the Agency continues to implement recommendations from the National Academy of Sciences (NAS) National Research Council regarding scientific and technical issues related to the methods and assumptions used by EPA and the Services to carry out their joint responsibilities under the ESA and FIFRA. Since receiving the NAS report, the four agencies have developed shared scientific approaches, solicited input from stakeholders, and presented those approaches to stakeholders. During FY 2021, EPA will continue to improve the Biological Evaluations methodology and will apply the revised approaches to selected pesticide risk assessments.

In January 2018, EPA, the U.S. Department of the Interior and the U.S. Department of Commerce signed a Memorandum of Agreement (MOA) creating a Working Group charged with reviewing statutory requirements, regulations and cases, and making recommendations to improve scientific and policy approaches. The working group was formalized in the Agricultural Improvement Act of 2018 (2018 Farm Bill and included USDA and the Council for Environmental Quality [CEQ]). The Farm Bill also transferred leadership of the working group from CEQ to EPA. Regular process reports also are required. The first report released in December 2019 outlines the recommendations and plans for implementation of those recommendations.

The Agency will continue to provide technical support for compliance with the requirements of the ESA. In FY 2021, EPA will continue the advancement and integration of state-of-the-art 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 office also will provide improved support to the risk assessment process during registration review by allowing risk assessors to more easily analyze complex scenarios relative to endangered species.

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. EPA's emphasis is to ensure 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 sections, 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 2021, EPA will continue to apply the best available science and risk management methods for sustaining pollinators.[136]

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 2021, the Agency will continue to work to develop sampling plans and refine program goals. Water quality is a critical endpoint for measuring exposure and risk to the environment and a measure of EPA's ability to reduce exposure from these key pesticides of concern.[137]

Evidence and Evaluation

EPA will continue, through EPA's Lean Management System (ELMS), to improve the review process for pesticide new active ingredient applications by reducing the timeframes to review these types of applications. In FY 2021, EPA will gather additional evidence, building on continuous efforts to map the process, use data visualization techniques, engage in enhanced collaboration activities, and identify and address bottlenecks. The Agency expects to reduce decision timeframes for new active ingredient applications, improve on-time percentages, and leverage those improvements for other related processes (e.g., new uses).

In FY 2019, EPA completed reviews of over 2,000 PRIA registration actions, with 97.6 percent of those actions being completed on or before PRIA negotiated due dates; registered 14 new pesticide active ingredients; published 85 pesticide draft risk assessments and 80 final/interim decisions for existing pesticides. In FY 2019, EPA took an average of 686 days to complete PRIA decisions, 55 days above the target of 631. Contributing factors included: (1) three of the 14 completions had longer statutory timeframes; (2) the total number of new active ingredient completions in FY 2019 was somewhat lower than normal; and (3) 12 of the 14 completions required renegotiation of the PRIA due date, which itself adds time to the overall process. The average exceedance of PRIA decision timeframes for new active ingredients (due to renegotiation) is 182 days which was significantly better than the FY 2019 target of 284 days. Reasons for the renegotiation of the PRIA due date in FY 2019 included: deficient applications; additional studies required; risk mitigation issues; public participation process; and the Federal Register Notice publication process.

As part of EPA's long-term commitment to ensure the effective advancement of the chemicals safety program to protect human health and the environment from potential risks of pesticides and toxic chemicals, the Agency's Office of Chemical Safety and Pollution Prevention will establish a presence in Research Triangle Park (RTP), North Carolina. Positions in RTP will be filled competitively and will not involve reassignments or involuntary moves, and the effort will utilize existing EPA space and resources. Establishing a presence in RTP is expected to improve

[136] Additional actions EPA is taking to protect pollinators from pesticides can be found at: https://www.epa.gov/pollinator-protection.
[137] 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.

recruitment of scientific staff and increase capacity to meet OCSPP's statutory and regulatory milestones under FIFRA, FQPA, ESA, and associated statutes.

Performance Measure Targets:

(PM 091) Percentage of decisions (registration actions) completed on time (on or before PRIA or negotiated due dates).

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target	97.0	96	96	97	99	99	99	99	Percent
Actual	85	98.4	99	99	99.7	98			
Numerator	1,627	2,078	2,157	2,008	2,193	2,034			Decisions
Denominator	1,919	2,111	2,174	2,026	2,199	2,085			

(PM FIFRA1) Number of FIFRA decisions completed through pesticides registration review.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					58	75	110	110	Decisions
Actual	22	33	41	56	64	80			

(PM FIFRA2) Number of FIFRA registration review draft risk assessments completed.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					70	72	80	85	Risk
Actual	37	59	59	76	112	85			Assessments

(PM PRIA1) Average number of days to complete PRIA decisions for new active ingredients.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					643	631	619	607	Days
Actual		627	687	638	603	686			

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$2,359.0) This change is an increase due to the recalculation of base payroll costs.
- (-$9,225.0 / -13.0 FTE) This net program change is a reduction for pesticide program activities from annual appropriations by increasing utilization of pesticide user fee collections.
- (+31.8 FTE) This program change shifts 31.8 FTE from annual appropriation to pesticides user fee collections based on the available balance.

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: A Cleaner, Healthier Environment
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$7,193.6***	***$7,722.0***	***$6,014.0***	***-$1,708.0***
Science & Technology	$354.6	$405.0	$684.0	$279.0
Total Budget Authority	$7,548.2	$8,127.0	$6,698.0	-$1,429.0
Total Workyears	31.9	35.8	46.3	10.5

Total program workyears in FY 2021 include 10.5 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

Program Project Description:

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.

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 FIFRA:

- Special Local Needs under FIFRA section 24(c);
- Federal registrations at the national level under FIFRA section 3;
- Experimental Use Permit;
- Emergency, Quarantine, and Crisis Exemption; and
- Periodic review of existing chemicals under the Registration Review Program.[138]

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.4 Ensure Safety of Chemicals in the Marketplace in the *FY 2018 – 2022 EPA Strategic Plan*.

[138] Additional information may be found here: https://www.epa.gov/pesticide-registration/types-registrations-under-fifra.

Meeting Agriculture's Need for Safe, Effective Pest Control Products

With the passage of FQPA, Congress acknowledged the importance of and need for "reduced-risk pesticides" and supported expedited agency review to help these pesticides reach the market sooner and replace older and potentially riskier chemicals. 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)[139] or makes it more effective." In FY 2021, EPA will continue to support and develop procedures and guidelines for expedited review of applications for registration or amendments for a reduced risk pesticide.

FIFRA's Version 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. For example, in FY 2019, the Agency completed just over 200 registrations for the primary PRIA category (R-300) that involves "me too" conventional chemical registration requests. The Agency expects to complete a similar volume of registrations in FY 2021.

Outreach and Education

In FY 2021, the Agency will continue to encourage IPM, which emphasizes minimizing the use of broad-spectrum chemicals and maximizing the use of sanitation, biological controls, and selective methods of application. EPA regions are committed to partnering with states, tribes, and territories to carry out IPM projects that inform pesticide users about the pest control options and how to best use them. It is not enough to have pesticide products registered to control pest infestations. Pesticide users need to know which pesticides to use, how to use them, and how to maintain the site, so pests do not return. The Pesticide Program is invested in outreach and training efforts for people who use pesticides and the public in general.

Review and Registration

During FY 2021, EPA will continue to review and register new pesticides, new uses for existing pesticides, and act on other registration requests in accordance with FIFRA and FFDCA standards as well as PRIA timeframes. Many of these actions will be for reduced-risk pesticides, which, once registered and used by consumers, will increase societal benefits. 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-

[139] For additional information, please visit: https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles.

related activities. The Agency will partner in the development of tools and informational brochures to promote IPM efforts and provide guidance to schools, farmers, other partners, and stakeholders.

Similarly, the Agency will continue work-sharing efforts with international partners. Through these collaborative activities and resulting international registrations, international trade barriers will be reduced. When nations with whom the U.S. trade accept imported crops treated with newer, lower-risk pesticides, domestic users can more readily adopt these newer pesticides into their Crop Protection Programs. Work-sharing efforts also reduce the costs of registration to governments by sharing the expenses.

Emergency, Quarantine, and Crisis Exemptions

In FY 2021, 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 2019, the Agency processed just over 110 requests for emergency uses and expects to process a similar level in FY 2021.

Evidence and Evaluation

The Program will continue, through EPA's Lean Management System (ELMS), to improve the review process for pesticide new active ingredient applications by reducing the timeframes to review these applications. In FY 2021, EPA will gather additional evidence to assist the Agency with: streamlining the process; mapping the process; using data visualization techniques; engaging in enhanced team collaborations, and identifying and addressing bottlenecks. The review process also will be streamlined by incorporating special antimicrobial sections and further monitoring the use of unregistered pesticides under Section 18. By identifying efficiencies in the process, the Agency expects to: reduce decision timeframes for new active ingredient applications; improve on-time percentages; and leverage those improvements for other related processes (e.g., new uses).

In FY 2019, EPA completed reviews of over 2,000 PRIA registration actions, with 97.6 percent of those actions being completed on or before PRIA negotiated due dates; registered 14 new pesticide active ingredients; published 85 pesticide draft risk assessments and 80 final/interim decisions for existing pesticides. In FY 2019, EPA took an average of 686 days to complete PRIA decisions, 55 days above the target of 631. Contributing factors included: (1) three of the 14 completions had longer statutory timeframes; (2) the total number of new active ingredient completions in FY 2019 was somewhat lower than normal; and (3) 12 of the 14 completions required renegotiation of the PRIA due date, which itself adds time to the overall process. The average exceedance of PRIA decision timeframes for new active ingredients (due to renegotiation) is 182 days which was significantly better than the FY 2019 target of 284 days. Reasons for the renegotiation of the PRIA due date in FY 2019 included: deficient applications; additional studies required; risk mitigation issues; public participation process; and the Federal Register Notice publication process.

Following the ELMS implementation in Fall 2019, additional tools and approaches were developed that will leverage the FY 2020 Lean projects and support the FY 2021 goals.

As part of EPA's long-term commitment to ensure the effective advancement of the chemicals safety program to protect human health and the environment from potential risks of pesticides and toxic chemicals, the Agency's Office of Chemical Safety and Pollution Prevention will establish a presence in Research Triangle Park (RTP), North Carolina. Positions in RTP will be filled competitively and will not involve reassignments or involuntary moves, and the effort will utilize existing EPA space and resources. Establishing a presence in RTP is expected to improve recruitment of scientific staff and increase capacity to meet OCSPP's statutory and regulatory milestones under FIFRA, FQPA, ESA, and associated statutes.

Biotechnology

EPA has a critical role in the successful implementation of the *Executive Order on Modernizing the Regulatory Framework for Agricultural Biotechnology Products* (EO 13874). EPA has been evaluating our current regulatory framework to determine if there are opportunities for streamlining current approaches to enable these important technologies to get to market efficiently. The Agency is working on exemptions for plant incorporated protectants (PIPs) engineered using biotechnology that are indistinguishable from PIPs made using natural plant breeding. EPA's proposed rule is under review and expected to be issued in Spring 2020. Additionally, in January 2020, EPA, USDA and FDA launched a unified website that provides a one-stop-shop for information about the actions the federal government is taking to oversee the development of agricultural biotechnology products.[140]

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 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$565.0) This change is an increase due to the recalculation of base payroll costs.
- (-$2,273.0 / +10.5 FTE) This net program change is a reduction in funding for pesticide program activities and shifts 10.5 FTE from annual appropriations with the intent to increase utilization of pesticide user fee collections.

Statutory Authority:

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

[140] For additional information, please visit: https://usbiotechnologyregulation.mrp.usda.gov/biotechnologygov/home/.

Resource Conservation and Recovery Act (RCRA)

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$34,554.0***	***$36,973.0***	***$35,126.0***	***-$1,847.0***
Total Budget Authority	$34,554.0	$36,973.0	$35,126.0	-$1,847.0
Total Workyears	183.0	174.4	172.0	-2.4

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 111 million Americans live within three miles of a RCRA corrective action facility (roughly 35 percent of the U.S. population),[141] and the total area covered by these corrective action sites is approximately 18 million acres.[142]

EPA works in close partnership with 44 states and one territory authorized to implement the Corrective Action Program[143] 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.

In FY 2019, EPA approved 127 RCRA corrective action facilities as ready for anticipated use (RAU), bringing the total number of RCRA RAU facilities to 1,476. In addition, 95 percent of the 2020 Baseline priority corrective action facilities achieved protection of human health while 90 percent achieved groundwater protection.

[141] U.S. EPA, Office of Land and Emergency Management Estimate 2017. Data collected includes: (1) site information as of the end of FY 2016 from RCRAInfo; and (2) census data from the 2011-2015 American Community Survey.
[142] Compiled RCRAInfo data.
[143] State implementation of the Corrective Action Program is funded through the STAG Categorical Grant: Hazardous Waste Financial Assistance and matching state contributions.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination, in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, the Program will focus its resources on continuing cleanup of 3,924 priority contaminated facilities (the 2020 Baseline plus 145 additional facilities), which include highly contaminated and technically challenging sites. As of the end of FY 2019, only 38 percent of the 2020 Baseline 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. Additionally, the 2020 Baseline is a subset of a larger group of facilities with potential corrective action obligations under RCRA. The Program's goals are to control human exposures, control migration of contaminated groundwater, complete final cleanups for the 2020 Baseline facilities, and identify, assess, and clean up additional priority facilities.

In FY 2021, EPA will:

- Prioritize meeting the RCRA RAU measure targets, ensuring that where possible properties are returned to productive use and human and the environment are protected into the future.

- Reassess its universe of cleanup facilities, priorities, and measures to ensure that resources are focused on addressing those facilities that present the highest 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.

- 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 issues[144] or special tasks (e.g. ecological risk assessments).

- Continue to improve cleanup approaches and share best practices and cleanup innovations, such as the use of the Lean RCRA FIRST (Facilities Investigation Remedy Selection Track)[145] toolbox, cleanup optimization tools, and other techniques to speed up and improve cleanups.

[144] For example, vapor intrusion, wetlands contamination, or extensive groundwater issues.
[145] For more information, please visit: https://www.epa.gov/hw/toolbox-corrective-action-resource-conservation-and-recovery-act-facilities-investigation-remedy.

- 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, which is mandated by RCRA Sections 3002 and 3004. The last biennial report 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.

Performance Measure Targets:

(PM CA5RC) Number of RCRA corrective action facilities with final remedies constructed.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target						98	98	98	Facilities
Actual	56	60	64	67	70	80			

(PM RSRAU) Number of RCRA corrective action facilities made ready for anticipated use.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					75	91	117	133	Facilities
Actual	84	93	75	72	117	127			

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$1,891.0) This change an increase due to the recalculation of base payroll costs.

- (-$3,738.0 / -2.4 FTE) This net program change will modify the timeline for initiating and ongoing cleanups. EPA will prioritize resources on those facilities that present the highest risk to human health and the environment.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) §§ 3004, 3005, 8001.

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$58,728.3***	***$66,819.0***	***$50,399.0***	***-$16,420.0***
Hazardous Waste Electronic Manifest System Fund	$14,485.5	$0.0	$0.0	$0.0
Total Budget Authority	$73,213.8	$66,819.0	$50,399.0	-$16,420.0
Total Workyears	290.4	296.8	233.2	-63.6

Total workyears in FY 2021 include 15.0 FTE funded by e-Manifest fees. FY 2019 Actuals include obligations of e-Manifest fees. E-Manifest fees are not included in FY 2020 Enacted or FY 2021 President's Budget levels, but EPA anticipates collecting approximately $26 million in e-Manifest fees in FY 2020 and FY 2021.

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.[146] 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.[147]

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.

EPA and its state partners issue, update, maintain, and oversee RCRA controls for approximately 20,000 hazardous waste units (e.g., incinerators, landfills, and tanks) located at 6,600 treatment, storage, and disposal facilities.[148] 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.

[146] Memorandum, February 18, 2014, from Industrial Economics to the 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.
[147] 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.
[148] As compiled by RCRAInfo.

EPA directly implements the entire RCRA Program in Iowa and Alaska and provides leadership, work-sharing, and support to the 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.

In FY 2019, EPA permitted, clean-closed, or otherwise had initial controls in place to prevent release at 33 facilities. Issuance of controls decreases the risk of future releases and enhances protection of human health and the environment. Additionally, EPA issued RCRA hazardous waste permit renewals or clean-closures to 124 facilities. 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. In FY 2019, EPA and the states are implementing the Generator Improvement Rule which updated and modernized the regulations for hazardous waste generators to bring them into the 21st Century.

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.[149] As part of an EPA effort to reduce ocean pollution and plastics, the Program will provide technical expertise to support development and implementation of solid waste management systems and infrastructure to help ensure that trash is appropriately collected, recycled, reused, or properly disposed of to prevent litter from entering waterways from land.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, the RCRA Waste Management Program will:

- Provide technical assistance 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.

[149] 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.

- Review and approve PCB cleanup, storage, and disposal activities to reduce exposures, particularly in sensitive areas like schools and other public spaces. EPA will prioritize PCB approvals and expedite high priority cleanups or address those unaddressed in a timely fashion. Issuing PCB approvals is a federal responsibility, non-delegable to states.

- Under EPA's Lean Management System, EPA will monitor progress in issuing permits more quickly in achieving program goals. This includes progress towards meeting the Agency's goal of reaching all permitting-related decisions in a timely manner.

- Manage the hazardous waste import/export notice and consent process. EPA will continue to implement the process and data system (the Waste Import Export Tracking System) improvements and upgrades 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.

- Take action as necessary regarding regulations to ensure protective management of coal combustion residuals (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 Water Infrastructure Improvements for the Nation Act of 2016, which enables states to submit for EPA approval state CCR permit programs. 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.

Performance Measure Targets:

(PM HW5) Number of permit renewals issued at hazardous waste facilities.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					64	64	105	105	Facilities
Actual	110	100	89	125	109	124			

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$3,460.0) This change is an increase due to the recalculation of base payroll costs.

- (-$20,579.0 / -68.6 FTE) This net program change reflects a focus on PCB cleanup and hazardous waste disposal programs, while reducing technical assistance to stakeholders regarding the development, approval, and implementation of solid waste management programs.

- (+$699.0 / +1.0 FTE) This program change supports the Agency's effort to reduce ocean pollution and plastic by sharing waste management approaches and technical assistance with select developing countries and vulnerable communities.

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.

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$8,840.2***	***$8,997.0***	***$4,253.0***	***-$4,744.0***
Total Budget Authority	$8,840.2	$8,997.0	$4,253.0	-$4,744.0
Total Workyears	40.7	43.4	5.0	-38.4

Program Project Description:

Managing materials sustainably promotes economic growth and reduces environmental impacts. The U.S. recycling industry provides more than 757,000 jobs and $6.7 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.[150]

EPA will update the RCRA Waste Minimization and Recycling Program in FY 2021 to focus on efforts to strengthen the U.S. recycling industry and enhance food loss and food waste prevention.

In FY 2020, the Program is conducting the following activities:

- Providing national leadership and direction on approaches to reduce environmental impacts, increase safe and effective reuse/recycling of materials, and reduce food waste;
- Partnering with a wide range of stakeholders (industry, governments, non-profits, and others) to implement efficient and innovative solutions that help protect human health and the environment through improved materials management, reduced waste generation, and improved waste utilization;
- Improving metrics, identifying critical data gaps, and gathering and providing high-quality scientific information and data;
- Implementing targeted, incentive-based programs to encourage participants to modify business practices to increase recycling and reduce food waste, enabling industries to efficiently conserve resources, save money, and increase competitiveness.

In FY 2019, EPA engaged with stakeholders including recyclers, brands, industry representatives and associations, state, territorial, tribal, and local government representatives, and trade associations to identify key challenges facing the U.S. recycling system as well as ways for EPA to support stakeholders' efforts.

[150] For more information, please refer to: https://www.epa.gov/smm/recycling-economic-information-rei-report.

In FY 2018, EPA, U.S. Department of Agriculture, and U.S. Food and Drug Administration launched the *Winning on Reducing Food Waste Initiative.* EPA along with its partner agencies affirmed their shared commitment to work towards the national goal of reducing food loss and food waste by fifty percent by 2030.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, EPA will focus $4.25 million to improve the U.S. recycling system and prevent food loss and food waste by implementing the following actions:

- Perform a needs assessment of the U.S. recycling industry. This assessment will include the development of metrics to assess national recycling system performance, estimate the financing gap for recycling infrastructure, and perform regular evaluations to determine effectiveness and make needed adjustments.
- Use the needs assessment to identify appropriate federal actions, including exercising national leadership and harmonization of standards, and working with stakeholders to develop a national strategy designed to help ensure long-term economic and environmental viability of local recycling programs. Actions will be designed to strengthen markets, reduce cross contamination and commingling of materials, and prevent recyclable materials from polluting the environment.
- Administer two grant programs:
    - A grant program for state and local governments to build or enhance recycling capacity and infrastructure around the country. The grant program will support pilots and infrastructure in communities seeking to enhance their capacity to recover and recycle materials.
    - A grant program to support local governments and/or non-governmental organizations in developing, implementing, and evaluating effective informational campaigns that educate the public about food waste and organics management. This grant program will fund research that provides framework for effective food waste reduction methods.
- Develop a pilot innovation incentive/prize program to encourage creation of products made with recycled content, increase use of recycled content in existing products, and increase use of recycled materials in manufacturing.

Performance Measure Targets:

(PM RFW) Number of stakeholder actions taken to increase recycling and reduce food loss and waste.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target								9,750	Actions
Actual									

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$2,218.0 / +2.0 FTE) This program change funds a needs assessment of the U.S. recycling industry, including the development of metrics to assess recycling system performance, an estimate of the financing gap for recycling infrastructure, and a review of existing programs.

- (+$1,518.0 / +2.0 FTE) This program change funds two grant programs. One program will support recycling infrastructure and capacity and the other program will develop, implement, and evaluate effective food waste reduction campaigns.

- (+$508.0 / +1.0 FTE) This program change supports a pilot innovation incentive/prize program to encourage creation of products made with recycled content and increased use of recycled materials in manufacturing.

- (-$8,988.0 / -43.4 FTE) This funding change refocuses the Program from efforts in Sustainable Materials Management to the priority areas of recycling and food waste and loss.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA).

Toxics Risk Review and Prevention

Endocrine Disruptors
Program Area: Toxics Risk Review and Prevention
Goal: A Cleaner, Healthier Environment
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$8,178.1***	***$7,533.0***	***$0.0***	***-$7,533.0***
Total Budget Authority	$8,178.1	$7,533.0	$0.0	-$7,533.0
Total Workyears	6.6	7.6	0.0	-7.6

Program Project Description:

The Endocrine Disruptor Screening Program (EDSP) was established in 1996 under authorities contained in the Federal Food, Drug and Cosmetic Act and the Safe Drinking Water Act amendments. Current activities within the EDSP include transitioning to the use of high throughput screening and computational toxicology tools to screen thousands of chemicals for endocrine activity, establishing policies and procedures for screening and testing, and evaluating data to ensure chemical safety by protecting public health and the environment from endocrine disrupting chemicals.

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021. EPA will absorb the remaining functions within the Pesticides Program using the currently available tiered testing battery.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$7,533.0 / -7.6 FTE) This funding change proposes to eliminate the EDSP. The relevant functions of the Program can be continued within the Pesticides Program.

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: More Effective Partnerships
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$11,657.5***	***$11,127.0***	***$0.0***	***-$11,127.0***
Total Budget Authority	$11,657.5	$11,127.0	$0.0	-$11,127.0
Total Workyears	42.5	49.2	0.0	-49.2

Program Project Description:

The Pollution Prevention (P2) Program advances environmental stewardship and sustainability efforts by federal, state and tribal governments, businesses, communities, and individuals. The Program seeks to alleviate environmental problems by achieving reductions in: the generation of hazardous releases to air, water, and land; the use of hazardous materials; the generation of greenhouse gases; and the use of water. The P2 Program also helps businesses and others leverage preventative approaches to reduce costs.

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021. Based on previous investments in P2 made under this program project, partners are expected to be able to continue to share best practices and pursue additional P2 solutions. EPA will continue to meet core statutory requirements under the Pollution Prevention Act of 1990 in other programs.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$11,127.0 / -49.2 FTE) This funding change proposes to eliminate the Pollution Prevention Program.

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: A Cleaner, Healthier Environment
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$64,241.5***	***$60,488.0***	***$69,004.0***	***$8,516.0***
Total Budget Authority	$64,241.5	$60,488.0	$69,004.0	$8,516.0
Total Workyears	259.8	280.1	321.6	41.5

Total program workyears in FY 2021 include 51.6 FTE funded by TSCA fees. FY 2019 Actuals include obligations of TSCA Service Fees and the advance on appropriations for those fees. TSCA Service Fees are not included in FY 2020 Enacted or FY 2021 President's Budget levels, but EPA anticipates collecting approximately $7.75 million in such fees in FY 2020 and $34.75 million in FY 2021.

Program Project Description:

Under the Toxic Substances Control Act (TSCA), as amended in 2016 by the *Frank R. Lautenberg Chemical Safety for the 21st Century Act*,[151] EPA has significant responsibilities for ensuring that chemicals in or entering commerce do not present unreasonable risks to human health or 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[152] by collecting chemical data, conducting risk evaluations, and by developing and implementing risk management actions, where appropriate, to prevent any unreasonable risk posed by their manufacture, use and/or disposal; and

- New chemicals by reviewing new chemical notices submitted by industry, including Pre-Manufacture Notices (PMNs), Significant New Use Notices (SNUNs), and Microbial Commercial Activity Notices (MCANs), and taking action, as appropriate, to ensure that no unreasonable risk will be posed by such chemicals upon their entry into U.S. commerce.

Under amended TSCA, the CRRR Program collects user fees designed to defray 25 percent of its costs for administering certain sections[153] of TSCA.[154] Fee levels may be adjusted by regulation on a recurring three-year basis for inflation and to ensure that fees defray 25 percent of relevant

[151] *See*, Public Law 114-182 (June 22, 2016); 130 Stat. 448.
[152] "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.
[153] The costs of implementing TSCA (as amended) Sections 4, 5 and 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.
[154] 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.

costs. Chemical manufacturers (including importers) and, in limited instances, processors began incurring TSCA User Fees on October 1, 2018.[155]

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.4 Ensure Safety of Chemicals in the Marketplace in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, the Agency will continue implementation of the amendments to TSCA, with emphasis on the critical mandates and timelines applicable to pre-market review of new chemicals, chemical risk evaluation and management, review and make determinations on incoming Confidential Business Information (CBI) claims, and other statutory priorities. EPA anticipates an increased workload to support these efforts in FY 2021 to perform any necessary risk management regulatory actions in response to the findings of the first 10 risk evaluations for existing chemicals to be finalized in FY 2020; to develop draft risk evaluations for the 20 High-Priority Chemicals being initiated by EPA in FY 2020; and to initiate or continue up to 10 risk evaluations in response to requests by manufacturers. At the same time, the Agency will work to further reduce review timeframes for PMNs for new chemicals, continue to review CBI claims, and carry out other required TSCA CRRR activities as described below.

Primary TSCA Implementation Activities

Testing of Chemical Substances and Mixtures. TSCA Section 4, as amended, authorizes EPA to require testing of a chemical substance or mixture by manufacturers (including importers) or processors. In FY 2021, the Agency will continue to: review test data submitted from prior test rules and enforceable consent agreements; issue Test Orders, Test Rules, and/or Enforceable Consent Orders as necessary to support chemical prioritization, risk screening, and risk evaluation activities; and make use of available data in prioritizing chemicals for collection of testing information and evaluation of potential risks.

New Chemicals. Under TSCA Section 5, as amended, EPA is responsible for reviewing all new chemical submissions to determine whether the chemicals may pose unreasonable risks to human health or the environment. In FY 2021, the Agency will: review and manage the potential risks from approximately 1,000 new chemicals, prior to their entry into the marketplace; evaluate data submitted under requirements of Section 5 Consent Orders; and continue to use Section 5 authorities to issue Significant New Use Rules (SNURs) to require notification to EPA for significant new uses of existing chemicals, where applicable. As part of this work, the CRRR Program will continue to make improvements to internal data and tracking systems to enhance the efficiency of the new chemical review process. A kaizen event, as part of the EPA Lean Management System (ELMS), was conducted by the program in FY 2018 and identified a number of opportunities to enhance the efficiency of the review process, including: employing a team-based review approach; improving TSCA CBI Local Area Network (LAN) system performance; and improving electronic communication with submitters. These improvements have increased the program's on-time 90-day review performance from 18 percent in FY 2017 to 70 percent in FY

[155] The statute authorizes EPA to collect fees from chemical manufacturers (including importers) and, in limited instances, processors who: are required to submit information (TSCA section 4); submit notification of or information related to intent to manufacture a new chemical or significant new use of a chemical (TSCA section 5); manufacture, (including import) a chemical substance that is subject to an EPA-initiated risk evaluation (TSCA section 6); or request that EPA conduct risk evaluation on an existing chemical (TSCA section 6), subject to the Agency's approval of the request.

2018 and 78 percent in FY 2019, and will provide increased regulatory certainty to submitters by enhancing communications about review timeframes and associated risk management actions.

Risk Evaluations. Under TSCA Section 6, as amended, EPA is required to maintain an ambitious schedule for initiating and completing risk evaluations of existing chemicals. When unreasonable risks are identified, TSCA sets timelines for initiating and completing risk management regulatory actions to address those unreasonable risks. In FY 2021, key activities will include:

- **Chemical Prioritization and Risk Evaluation:** EPA will develop draft risk evaluations for the 20 High-Priority Chemicals designated in December 2019 to undergo risk evaluation under the amended law. Scoping documents for these evaluations are scheduled to be released by EPA in June 2020. Of important note, the law also includes provisions allowing manufacturers to request that EPA conduct evaluations of specific chemicals. EPA is required to undertake manufacturer-requested risk evaluations that meet the Agency's acceptance criteria at levels up to 50 percent of the number of EPA-initiated evaluations underway. In December 2019, EPA granted manufacturer requests for risk evaluations of two chemicals used in plastic production (Diisodecyl Phthalate [DIDP] and Diisononyl Phthalate [DINP]) and has proceeded to initiate the requested evaluations. EPA will continue work on draft risk evaluations for these chemicals in FY 2021.

- **Risk Management:** When unreasonable risks are identified in the final risk evaluation, EPA must finalize risk management action rulemakings under TSCA Section 6(a) to address the unreasonable risk within two years, or up to four years if an extension is utilized. Accordingly, the Agency may be proposing risk management actions in FY 2021 for chemicals that have been found to present an unreasonable risk based upon the first 10 risk evaluations completed in FY 2020. EPA also will continue work on developing regulations for commercial uses of methylene chloride for paint and coating removal which began prior to amended TSCA.

- **Persistent, Bioaccumulative and Toxic (PBT) Chemical Action:** In FY 2021, EPA will pursue risk management regulatory action on certain other chemicals. TSCA Section 6(h) establishes a fast-track process to address certain PBT chemicals on the 2014 TSCA Work Plan. EPA proposed a regulation in June 2019 for five such chemicals based upon peer-reviewed exposure and use assessments. EPA expects to finalize these regulations in FY 2021.

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, and similar persons under defined circumstances; and, assign and publish unique identifiers for each chemical substance for which a confidentiality claim for specific chemical identity is approved. EPA is updating policies, regulations, and guidance to implement the amendments. In FY 2019, the Agency completed reviews of more than 1,900 CBI claims, made determinations on over 400 cases and concluded that no determination was necessary for over 1,500 cases. In FY 2021, EPA will assign unique identifiers to chemicals where CBI claims for chemical identity are upheld and will complete CBI claim reviews for: more than 2,500 new cases anticipated to be associated with Section 4, 5 and 8 submissions; approximately 2,000 chemical

identity claims associated with Notice of Activity submissions; and more than 2,000 CBI cases from the backlog that has developed since 2016 pending finalization of EPA's review procedures.

Other TSCA CRRR Mandates and Activities

Information collection under TSCA Section 8. In FY 2021, EPA will: maintain the Mercury Electronic Reporting Application;[156] conduct outreach to stakeholders on how to report required information by the Application; analyze about 300 Substantial Risk (Section 8(e)) Notifications submitted by industry;[157] and implement a rule[158] that establishes a plan for reviewing claims to protect confidential chemical identities within one year of compiling the initial Inventory with active and inactive designations.[159,160]

Work Addressing Mercury. In FY 2021, EPA will continue to provide responses to any requests for exemption from export prohibitions under the Mercury Export Ban Act and work to support compliance with the Minamata Convention on Mercury, to which the United States is a party.

TSCA Citizen Petitions. In FY 2021, EPA also will continue to meet the requirements of Section 21 of TSCA, as amended, 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.

Formaldehyde Standards for Composite Wood Products. In FY 2021, EPA will implement regulations under the TSCA Title VI Formaldehyde Standards for Composite Wood Products Act (Public Law 111-199), which established national emission standards for formaldehyde in new composite wood products.[161]

Addressing Lead Risk Reduction and Supporting Children's Health. In FY 2021, the Agency will shift those activities required under TSCA Title IV (the Federal Lead-Based Paint Program) that are funded through the EPM appropriation into the CRRR Program. Reducing exposure to lead paint in old housing continues to offer the potential to significantly decrease blood lead levels in the largest number of children. Efforts to address exposure to lead paint must include homes and locations outside the home where young children spend significant amounts of time such as child care settings and schools.[162] In FY 2021:

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[156] The Mercury Electronic Reporting application is an electronic reporting interface and database within the Central Data Exchange (CDX).

[157] 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.

[158] The rule is to be promulgated in February 2020.

[159] These are chemical identities reported in retrospective commercial activity notices (the review plan rule must be finalized by February 18, 2020).

[160] CBI claims made by manufacturers or processors for chemical identities in retrospective activity notices must be reviewed and determinations made no later than five years after the rule is final (compiling the initial Inventory). The current Inventory has approximately 7,750 chemicals on the confidential portion that have been reported as being active in commerce in the last 10 years.

[161] For additional information, please visit: http://www2.epa.gov/formaldehyde/formaldehyde-emission-standards-composite-wood-products.

[162] U.S. Environmental Protection Agency (EPA). (2008). *Child-Specific Exposure Factors Handbook* (Final Report). Retrieved from: https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=199243.

- For states without federal authorization, EPA will provide firm and individual certifications for safe work practices for lead-based paint abatement and Renovation, Repair, and Painting (RRP) Program efforts; provide operation and maintenance of the online database (Federal Lead-Based Paint Program) that supports the processing of applications for training providers, firms and individuals; and continue efforts to increase the number of certified renovation firms capable of providing lead-safe renovation, repair, and painting services through targeted outreach campaigns to contractors. The rate of firm recertifications under the RRP Program has averaged 23 percent since FY 2017, while the total number of new firms seeking certification has remained steady from quarter to quarter. As outlined in the FY 2020-2021 Lead Agency Priority Goal (APG) Action Plan, by September 30, 2021, EPA will increase the recertification rate of lead-based paint renovation, repair, and painting firms to 28 percent from a baseline of 23 percent. EPA will strive to increase the recertification rate and will continue to publish an updated list of certified renovation firms on the Agency's website.[163] Other forms of lead exposure are proposed to be addressed through other targeted programs that offer enhanced flexibility, such as lead pipe replacement, multi-media toxics reduction work under the Multipurpose Grants Program, and other multi-faceted toxics reduction work under the Healthy Schools Grant Program.

- In accordance with an order from the Ninth Circuit Court of Appeals, EPA published a proposed rule in the *Federal Register* on July 2, 2018,[164] to change the dust-lead hazard standard (also known as the "lead dust hazard standard") from 40 µg/ft^2 and 250 µg/ft^2 to 10 µg/ft^2 and 100 µg/ft^2 on floors and window sills, respectively. EPA did not propose to change the post-abatement clearance levels in this proposal; however, the Agency noted that it intended to review the clearance levels at a later date. The Court also ordered the Agency to propose a rule on the definition of lead-based paint. EPA proposed to make no change to the definition of lead-based paint because the Agency currently lacks sufficient information to support such a change. On June 21, 2019, EPA finalized this action at the proposed levels.[165] In this rulemaking, EPA also committed to addressing the clearance levels for floors and window sills in a subsequent proposed rule. In FY 2021, EPA will continue work as necessary to finalize the rulemaking for clearance levels, with a planned publication date for the final rule in FY 2021.

- Per a settlement agreement, in FY 2021, EPA will continue to work on determining the extent to which renovations of pre-1978 public and commercial buildings do or do not create lead-based paint hazards and develop appropriate work practice standards to the extent they are deemed necessary.

Information Technology (IT) in Support of TSCA Implementation

In line with the President's Management Agenda, TSCA IT systems development will continue in FY 2021 with the goal of minimizing reporting burdens on industry, and streamlining data management by EPA, including the following activities:

[163] For additional information, please visit: https://cfpub.epa.gov/flpp/pub/index.cfm?do=main.firmSearch.
[164] For additional information, please visit: https://www.federalregister.gov/documents/2018/07/02/2018-14094/review-of-the-dust-lead-hazard-standards-and-the-definition-of-lead-based-paint.
[165] For additional information, please visit: https://www.regulations.gov/document?D=EPA-HQ-OPPT-2018-0166-0360.

- Continuing enhancement of the TSCA Chemical Information System (CIS) to reduce manual handling of data, increase internal EPA access to data relevant to chemical assessments, and expedite review of chemicals;

- Continuing integration of TSCA information management, e-Reporting, and public access systems with the Agency's E-Enterprise business strategy and leveraging the E-Enterprise portal to provide better customer service for external users;

- Developing new tools for hazard and exposure identification assessment and characterization, while improving existing tools to better assess risks from both new and existing chemicals; and

- Maintaining and enhancing the functionality of *ChemView* and 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.

Continuous Improvement of TSCA Implementation

In FY 2021, the Agency will monitor and evaluate its progress on key metrics related to carrying out its core responsibilities under the amended law in a timely manner. These include TSCA-related long-term performance goals to complete all EPA-initiated risk evaluations and associated risk management actions for existing chemicals within statutory timelines, supported by internal monthly tracking systems. EPA made considerable progress towards meeting the FY 2018-2019 APG for TSCA risk management actions and risk evaluations with key milestones achieved or in progress as of the end of FY 2019.

In addition, EPA plans to further reduce review times for new PMNs, MCANs, and SNUNs. Although substantially improved from FY 2018, the performance rate of all TSCA PMN final determinations completed within 90 days was 78 percent in FY 2019, slightly below the 80 percent target for both the FY 2018-2019 APG and annual performance goal. The Agency continues to meet 100 percent of final TSCA new chemical determinations within the full timeframes allowable by statute (including statutorily-allowable extensions). In FY 2021, EPA will continue its aim of making 80 percent of all final determinations within the initial 90-day review period.

EPA also will undertake other forms of assessment and evidence gathering in FY 2021. The Agency's ongoing risk evaluation processes for existing chemicals utilize scientific evidence obtained from data gathered pursuant to TSCA authorities and systematic review of literature sources in making the risk determination required under amended TSCA. EPA's approach to systematic review is described in *Application of Systematic Review in TSCA Risk Evaluations* (May 2018)[166] and will be the focus of an EPA-initiated review by the National Science Foundation (NAS) to be initiated in FY 2020. Additional evidence will be obtained by completing an annual programmatic risk assessment exercise and a statutorily required EPA Office of the Inspector General audit of TSCA user fees to determine whether fee levels are appropriate.

[166]For additional information, please visit: https://www.epa.gov/sites/production/files/2018-06/documents/final_application_of_sr_in_tsca_05-31-18.pdf.

Finally, as part of EPA's long-term commitment to ensure the effective advancement of the chemicals safety program to protect human health and the environment from potential risks of pesticides and toxic chemicals, the Agency's Office of Chemical Safety and Pollution Prevention will establish a presence in Research Triangle Park (RTP), North Carolina. Positions in RTP will be filled competitively and will not involve reassignments or involuntary moves, and the effort will utilize existing EPA space and resources. Establishing a presence in RTP is expected to improve recruitment of scientific staff and increase capacity to meet OCSPP's statutory and regulatory milestones under TSCA, and associated statutes..

Performance Measure Targets:

(PM TSCA1) Number of final EPA-initiated TSCA risk evaluations completed within statutory timelines.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					No Target Estab-lished	N/A	10	N/A	Evaluations
Actual				0	N/A	N/A			

(PM TSCA2) Number of final existing chemical TSCA risk management actions completed within statutory timelines.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					No Target Estab-lished	N/A	N/A	1	Actions
Actual				0	N/A	N/A			

(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 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					65	80	80	80	Percent
Actual					58.4	78			
Numerator					45	103			Final Determin-ations
Denominator					77	132			

(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 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target						100	100	100	Percent
Actual				100	100	100			
Numerator				567	292	429			Final Determin-ations
Denominator				567	292	429			

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$2,523.0) This change is an increase due to the recalculation of base payroll costs.

- (+$5,993.0 / +21.3 FTE) This net program change is an increase of 21.3 appropriated FTE to support the implementation of efforts to meet statutory deadlines for prioritization, risk evaluation, and risk management of existing chemicals and to streamline and accelerate the review of premanufacture notices and significant new use notices for new chemicals.

- (+20.2 FTE) This program change reflects increased utilization of TSCA user fee collections to support the implementation of efforts to meet statutory deadlines for prioritization, risk evaluation, and risk management of existing chemicals and to streamline and accelerate the review of pre-manufacture and significant new use notices for new chemicals.

Statutory Authority:

Toxic Substances Control Act (TSCA).

Toxic Substances: Lead Risk Reduction Program
Program Area: Toxics Risk Review and Prevention
Goal: A Cleaner, Healthier Environment
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$11,663.0***	***$11,567.0***	***$0.0***	***-$11,567.0***
Total Budget Authority	$11,663.0	$11,567.0	$0.0	-$11,567.0
Total Workyears	56.7	62.9	0.0	-62.9

Program Project Description:

Reducing exposure to lead paint in old housing has the potential to significantly decrease blood lead levels in children. Efforts to reduce lead paint exposure must include homes and locations outside the home where young children spend significant amounts of time, such as child care settings and schools.[167]

EPA's Lead Risk Reduction Program contributes to the goal of reducing childhood lead exposure by: establishing a national pool of certified firms and individuals who are trained to carry out renovation and repair and painting projects while adhering to the lead-safe work practice standards, and to minimize lead dust exposure created during the course of such projects; establishing standards governing lead hazard identification and abatement practices and maintaining a national pool of professionals trained and certified to implement those standards; and providing information and outreach to housing occupants and the public so they can make informed decisions and take actions about potential lead hazards in their homes.

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021. With the coordinated implementation of the *Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts* (Lead Action Plan), other forms of lead exposure are proposed to be addressed through other targeted programs, such as lead pipe replacement, multi-media toxics reduction work under the Multipurpose Grants Program, and other multi-faceted toxics reduction work under the Healthy Schools Grant Program.

In FY 2021, EPA will continue to provide firm and individual certifications for safe work practices for lead-based paint abatement and renovation and repair efforts through the Chemical Risk Review and Reduction (CRRR) Program. EPA will continue to provide for the operation and maintenance of the online database that supports the processing of applications for training providers, firms and individuals, and finalization of the rulemaking for clearance levels for lead-

[167] U.S. Environmental Protection Agency (EPA). (2008). *Child-Specific Exposure Factors Handbook* (Final Report), retrieved from: https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=199243.

based dust on floors and window sills, with a planned publication date for the final rule in July 2021, through the CRRR Program. Support for implementation of the Lead Program will continue at the State level in States with delegated programs from funding under the Categorical Grant: Lead Program.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (–$11,567.0 / -62.9 FTE) This funding change proposes to eliminate the Lead Risk Reduction Program by leveraging resources and expertise from other programs through coordinated implementation of the Lead Action Plan and funding direct implementation of the program in authorized states through STAG funds. Firm and individual certifications for safe work practices for lead-based paint abatement and renovation and repair efforts will be funded through the Chemical Risk Review and Reduction Program.

Statutory Authority:

Toxic Substances Control Act (TSCA).

Underground Storage Tanks (LUST/UST)

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$11,089.8***	***$10,750.0***	***$6,863.0***	***-$3,887.0***
Leaking Underground Storage Tanks	$10,133.9	$9,240.0	$7,149.0	-$2,091.0
Total Budget Authority	$21,223.7	$19,990.0	$14,012.0	-$5,978.0
Total Workyears	89.1	91.6	68.8	-22.8

Program Project Description:

Releases of petroleum from Underground Storage Tanks (UST) can contaminate groundwater, the drinking water source for many Americans. Environmental Program Management funding helps prevent releases by providing states[168] and tribes with technical assistance and guidance, and by funding work that assists states and tribes.

EPA partners with tribes to maintain information on tribal USTs and is the primary implementer of the UST Program in Indian Country. With few exceptions, tribes do not have independent UST program resources. This funding supports direct implementation of UST Program in Indian Country.

In 2005, Congress passed the Energy Policy Act which, along with other release prevention measures, required states to inspect all facilities in their jurisdictions at least once every three years. EPA has been supporting states in these efforts (and ensuring these requirements are met before continuing to grant additional funding for this). A recent EPA study suggests that increased UST compliance is a result of increasing inspection frequency prompted by the Act. EPA's statistical analysis, using the State of Louisiana's UST data, showed a positive and statistically significant effect of increased inspection frequency on facility compliance.[169] This evidence supports the data trends the Agency has been witnessing: compliance rates are higher today than they were a decade ago as a result of the three-year inspection requirement.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018-2022 EPA Strategic Plan.* EPA, with its state and tribal partners,

[168] 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.
[169] Sullivan, K. A.; Kafle, A (2017, May). Do more frequent inspections improve compliance? Evidence from underground storage tank facilities in Louisiana. OCPA Working Paper No. 2017-05. Retrieved from https://www.epa.gov/sites/production/files/2017-06/documents/olem_ocpa_working_paper_do_more_frequent_inspections_improve_compliance.pdf.

works to prevent releases of contamination and in partnership with tribes, provides training, compliance assistance, and inspection support to implement the 2015 UST regulations in Indian Country. Between the end of 2008 and the end of 2019, the number of annual confirmed releases has decreased by 27 percent (from 7,364 to 5,375).

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 determine the correlation between inspection frequency and compliance rates.

In FY 2021, EPA will:

- 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 our 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.

- Provide technical assistance to states and the regulated community regarding compatibility of UST systems with E15 and conduct inspections in Indian Country to ensure compatibility. Work in this area is important given the national growth in biofuels and other emerging fuels.[170]

- 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.[171]

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

[170] Please see the following EPA website: www.epa.gov/ust/emerging-fuels-and-underground-storage-tanks-usts#tab-2.
[171] Please see the following EPA website: www.epa.gov/ust/emerging-fuels-and-underground-storage-tanks-usts#tab-3.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$396.0) This change is an increase due to the recalculation of base payroll costs.

- (+$500.0) This program change is to enable EPA to continue studies into compatibility of new fuel formulations with current tank systems.

- (-$4,783.0 / -17.6 FTE) This net program change reflects a reduced workload due to the proposed elimination of the LUST Prevention and the Categorical Grant Underground Storage Tanks programs. With available resources, the Program will continue to directly implement a targeted compliance and release prevention program in Indian Country, and work with any state partners who choose to maintain an UST Program after the elimination of the federal grant funds.

Statutory Authority:

Resource Conservation and Recovery Act §§ 8001, 9001-9011.

Water Ecosystems

National Estuary Program / Coastal Waterways
Program Area: Water: Ecosystems
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$26,425.7***	***$29,823.0***	***$0.0***	***-$29,823.0***
Total Budget Authority	$26,425.7	$29,823.0	$0.0	-$29,823.0
Total Workyears	38.0	36.9	0.0	-36.9

Program Project Description:

The National Estuary Program (NEP)/Coastal Waterways Program works to restore the physical, chemical, and biological integrity of estuaries of national significance and coastal watersheds to protect and restore water quality, habitat, and living resources.[172]

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$29,823.0 / -36.9 FTE) This funding change proposes to eliminate the NEP/Coastal Waterways Program. EPA will encourage states to continue this work and continue to implement conservation management plans.

Statutory Authority:

Great Lakes Legacy Reauthorization Act of 2008; Clean Water Act § 320; Estuaries and Clean Waters Act of 2000; Protection and Restoration Act of 1990; North American Wetlands Conservation Act of 1989.

[172] For more information, please see: https://www.epa.gov/nep.

Wetlands

Program Area: Water: Ecosystems
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$17,234.9***	***$19,241.0***	***$22,604.0***	***$3,363.0***
Total Budget Authority	$17,234.9	$19,241.0	$22,604.0	$3,363.0
Total Workyears	106.1	116.4	130.0	13.6

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 tribal development program. Major activities of the Wetlands Protection Program include timely and efficient review of CWA Section 404 permit applications submitted to the U.S. 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 programs under the CWA; and providing technical assistance to the public on wetland management and legal requirements.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. Working with federal, state, tribal and local partners, EPA will help to ensure an effective, consistent approach to wetlands protection. This is done through both the Agency's work with USACE in federal CWA Section 404 permitting and work with states and tribes to build their wetlands programs.

CWA Section 404

USACE is responsible for managing the day-to-day permit processes nationwide under CWA Section 404. EPA engages in the USACE process to ensure compliance with the CWA Section 404(b)(1) guidelines as USACE formulates their proposed permits. EPA and USACE will work together to implement Executive Order 13807[173] and the accompanying Memorandum of Understanding and will continue to identify options for improving efficiencies in federal CWA Section 404 permitting that would help reduce potential costs and delays; increase consistency and predictability; improve protection of public health and the environment; and ensure permit

[173] EO 13807 requires Federal agencies to process environmental reviews and authorization decisions for "major infrastructure projects" as One Federal Decision (OFD) and sets a government-wide goal of reducing the average time for each agency to complete environmental reviews for such projects to two years.

decisions are legally defensible. In addition, EPA and USACE have initiated a rulemaking to enhance the efficiency of the compensatory mitigation program. EPA also has initiated a rulemaking to update the Agency's Section 404(c) regulations to provide greater certainty to property owners.

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 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 EPA has been assigned by the Council. As a NRDA Trustee, the Agency undertakes mandatory independent third-party financial audits every three years to ensure accountability regarding the use of funds provided under a 2016 Consent Decree.[174] The first independent third-party financial audit was initiated in FY 2018 and concluded in FY 2019.

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 with the flexibility they need to best address their priorities. This includes providing continued assistance for states and tribes interested in assuming administration of the CWA Section 404 program. EPA will propose a rule to update the existing assumption regulations and provide greater clarity to state and tribes on what waters may be assumed. EPA also will continue to administer Wetlands Program Development Grants in support of state and tribal wetlands programs, with a focus on working more efficiently with states and tribes to achieve specific program development outcomes including supporting state and tribal assumption of the CWA Section 404 program.[175]

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$2,762.0) This change is an increase due to the recalculation of base payroll costs.

- (+$601.0 / +13.6 FTE) This program change is an increase in resources and FTE to support priority efforts on infrastructure projects, regulatory permitting, and state delegations and

[174] For more information, please see: https://www.epa.gov/sites/production/files/2016-02/documents/deepwaterhorizon-cd.pdf.
[175] For more information, please see: https://www.epa.gov/wetlands or http://www.cfda.gov.

certifications. This will improve consistency and efficiencies and help ensure predictability and certainty in the CWA Section 401 and Section 404 programs.

Statutory Authority:

CWA § 404.

Water: Human Health Protection

Beach / Fish Programs
Program Area: Water: Human Health Protection
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$1,490.8***	***$1,584.0***	***$0.0***	***-$1,584.0***
Total Budget Authority	$1,490.8	$1,584.0	$0.0	-$1,584.0
Total Workyears	1.8	3.2	0.0	-3.2

Program Project Description:

The Fish Component of the Beach/Fish Program provides up-to-date-science, guidance, technical assistance, and nationwide information to state, tribal, and federal agencies on the human health risks associated with eating potentially contaminated locally caught fish.

The Beach Component of the Beach/Fish Program provides up-to-date science, guidance, technical assistance and nationwide information to state, tribal, and federal agencies on the human health risks of swimming in pathogen-contaminated waters.

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021. The Agency will encourage states to continue this work within ongoing core programs.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$1,584.0 / -3.2 FTE) This funding change proposes to eliminate the Beach/Fish Program. The program objectives can be continued at the local level.

Statutory Authority:

Clean Water Act § 104.

Drinking Water Programs
Program Area: Water: Human Health Protection
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$92,373.1***	***$100,903.0***	***$97,462.0***	***-$3,441.0***
Science & Technology	$3,227.6	$4,094.0	$4,364.0	$270.0
Total Budget Authority	$95,600.7	$104,997.0	$101,826.0	-$3,171.0
Total Workyears	461.6	475.2	459.9	-15.3

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 the safety of tap water provided by public water systems that are subject to national drinking water standards.[176] 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.[177] EPA protects public health through: 1) source water assessment and protection; 2) promulgation of new or revised National Primary Drinking Water Regulations (NPDWRs); 3) training, technical assistance, and financial assistance programs to enhance public water system capacity to comply with regulations and provide safe drinking water; 4) underground injection control (UIC) programs; 5) supporting implementation of NPDWRs by state and tribal drinking water programs through regulatory, non-regulatory, and voluntary programs and policies; and 6) providing states and tribes with resources and tools to support the financing of water infrastructure improvements.[178]

Recent events including the detection of lead and per- and polyfluoroalkyl substances (PFAS) in drinking water highlights the importance of safeguards to public health and local economies, and in particular, the need to prioritize threats and protect drinking water sources. The detection of lead and PFAS, such as perfluorooctanoic acid (PFOA), perfluorooctane sulfonate (PFOS) and Gen-X chemicals, exemplifies the increased demand for risk communication and other tools that can help communities across the country protect public health and address these chemicals.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, the Agency will continue to improve the

[176] 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.
[177] For more information, please see: https://www.epa.gov/sites/production/files/2015-10/documents/guide_swppocket_2002_updated.pdf.
[178] For more information, please see: https://www.epa.gov/ground-water-and-drinking-water and https://www.cfda.gov.

effectiveness and efficiency of regulatory programs for states and tribes. Over the five-year period of the *FY 2018 – 2022 EPA Strategic Plan*, EPA is pursuing a 23 percent reduction in the number systems that have health-based violations from 3,508 in FY 2017 to 2,700 by FY 2022. As of Fall 2019, approximately 1,982 of the 3,508 systems with health-based violations have been returned to compliance. The Drinking Water Program supports this effort by providing assistance and training to state drinking water programs, tribal drinking water officials, and technical assistance providers on: achieving and maintaining compliance at drinking water systems; developing best practices; strengthening state and tribal program capacity and certifying drinking water operators.

EPA also is enhancing its oversight of state drinking water programs by completing the annual public water system supervision program review for each primacy agency as required under the Safe Drinking Water Act (SDWA). Information gained during these reviews includes an analysis of the completion of sanitary surveys by the primacy agency and an evaluation of whether the primacy agency is implementing the state program in accordance with SDWA. The annual program review directly supports the work of the states and the Agency to meet the long-term performance goal in the *FY 2018 – 2022 EPA Strategic Plan*: By September 30, 2022, reduce the number of community water systems out of compliance with health-based standards to 2,700.[179]

Water Infrastructure

Infrastructure investment is essential as the drinking water and wastewater sectors face a significant challenge to protect public health and the environment despite the Nation's aging infrastructure. In FY 2021, EPA will continue to support funding of the Nation's drinking water infrastructure, focusing efforts to leverage and encourage public and private collaborative efforts and investments. EPA will continue to work on the seventh Drinking Water Infrastructure Needs Survey. This Survey provides a 20-year capital investment need for public water systems are eligible to receive funding from state DWSRF programs.

In FY 2021, EPA will continue to support financing and construction of drinking water infrastructure projects by doing the following in addition to supporting the Drinking Water State Revolving Fund Program:

- Advising states on maintaining their capacity development and operator certification programs to support compliance by public water systems with SDWA.
- Working with states to apply for Water Infrastructure Finance and Innovation Act (WIFIA) loans for eligible projects.
- Encouraging states to develop state-centric tools to assist water systems with capacity development and supporting coordination between Public Water System Supervision (PWSS) programs and states.

The Water Infrastructure Improvements for the Nation Act of 2016 (WIIN) and America's Water Infrastructure Act of 2018 (AWIA) strengthens many existing programs within EPA while creating new programs to tackle significant public health concerns and environmental needs. These

[179] 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.)

programs are vital to protecting public health, continuing to grow the American economy and ensuring that rural and urban communities from coast-to-coast can thrive. New mandates range from the creation of grant programs to promoting water workforce development. WIIN and AWIA mandates will be critical to achieving the Administration's priorities by increasing water infrastructure investment and improving drinking water and water quality across the country.

Drinking Water Implementation

In FY 2021, 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 treatment plants and distribution systems. In particular, EPA will continue to focus on working with states to optimize corrosion control treatment and develop other strategies to minimize exposure to lead. EPA also will continue to focus on the reduction of the number of community water systems with health-based violations, especially small systems which have additional challenges.

EPA also continues to 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 development of the Safe Drinking Water Information System Prime program management and reporting tool. Both systems support human health protection through efficient data management and decision support.

In FY 2021, EPA also will conduct the following activities to facilitate compliance with rules:

- Oversee 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.
- Offer training and technical assistance on a prioritized basis to states, tribes, and public water systems with significant noncompliance with the NPDWRs.
- Directly implement the Aircraft Drinking Water Rule, designed to protect millions of people who travel on approximately 5,700 aircraft in the U.S. annually.
- Directly implement 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).

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 2021, the Agency also will address drinking water risks, by:

- Publishing preliminary regulatory determinations for contaminants on the fourth contaminant candidate list (CCL 4) for public comment with the goal of publishing final determinations in early 2021. The list includes PFOA, PFOS, and other contaminants. In EPA's 2019 PFAS Action Plan, the Agency committed to making a final regulatory

determination in FY 2021. Making a final regulatory determination is the next regulatory step in the SDWA to establish a maximum contaminant level for PFOA and PFOS.

- Developing and publishing the draft fifth contaminant candidate list (CCL 5) based on the analysis of available health effects and occurrence data on unregulated contaminants.
- Conducting an analysis in support of the six-year review of existing NPDRWs utilizing state data for regulated contaminants collected between 2012-2018.
- Continuing to participate in an interagency effort to address PFAS (PFOA, PFOS, Gen-X*)* to better understand the health impacts, the extent of occurrence in the environment, and exposures to PFAS.
- Continuing to develop risk communication and other tools to support states, tribes and localities in managing PFAS in their communities.
- Continuing to support state efforts to manage cyanotoxins in drinking water, including providing technical assistance.
- Engaging stakeholders and developing draft technical support documents on the scientific basis for the Microbial and Disinfection Byproducts Rule revisions.
- Providing support to and oversight of drinking water systems and laboratories as they complete the collection and analysis of samples during the implementation of the fourth Unregulated Contaminant Monitoring Rule (UCMR 4).
- Developing the final rule for the next cycle of UCMR monitoring (UCMR 5). This includes evaluating and addressing public comments on the UCMR 5 proposed rule.
- Measuring progress via the FY 2020-2021 Lead and PFAS APGs.

Source Water Protection

EPA will continue to partner with states, federal counterparts, drinking water utilities, and other stakeholders to identify and address current and potential impacts to sources of drinking water. In FY 2021, the Agency will:

- Continue to develop data-layers and decision support tools to assist source water assessment, planning, and emergency preparation efforts including the Drinking Water Mapping Application for Protecting Source Waters and an online GIS program available through EPA's web-based geospatial platform, *Geoplatform.*[180]
- Work 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.
- Continue to partner with United States Department of Agriculture (USDA)'s Natural Resources Conservation 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.
- Continue 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.

[180] For more information, please see: https://www.epa.gov/sourcewaterprotection/dwmaps.

- Work with stakeholders to implement source water protection provisions mandated by AWIA. 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, support community water systems having access to hazardous chemical inventory data.
- Continue 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 the SDWA and the Clean Water Act (CWA).
- Provide compliance assistance at drinking water and wastewater systems through the use of circuit riders with requested additional resources for technical assistance.

Underground Injection Control (UIC)

To safeguard current and future underground sources of drinking water from contamination, the UIC Program regulates the permitting, construction, operation, and closure of injection wells that place fluids underground for storage, disposal, enhanced recovery of oil and gas, and minerals recovery. In FY 2021, 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.
- 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.
- Working with the State of California to review and approve aquifer exemptions so that the state program is consistent with the SDWA and UIC regulations.
- Providing technical assistance, tools, and strategies to states for improving implementation of UIC programs, including development of e-learning material.
- Using national UIC data to assist with promoting nationally consistent approaches to program oversight of state and EPA UIC programs.
- Streamlining EPA UIC direct implementation permitting, developing standard work, deploying Lean management principles and reducing the permit application backlog. Through these efforts, the backlog of EPA-issued new UIC permits decreased from 36 to 26 in FY 2019.

Performance Measure Targets:

(PM DW-01) Community water systems out of compliance with health-based standards.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					3,510	3,380	3,280	3,060	CWSs
Actual	4,682	5,050	4,817	3,508	3,480	3,547			

Work under this program supports performance results in the Compliance Monitoring Program under the EPM appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$5,394.0) This change is an increase due to the recalculation of base payroll costs.

- (+$3,274.0 / + 2.8 FTE) This program change is an additional increase to support the PFAS focus area, including the implementation of the drinking water elements of EPA's PFAS Action Plan related to policy development and regulatory efforts to address PFAS in drinking water systems.

- (+$25.0) This program change is an increase under the circuit rider focus area to support compliance assistance for drinking water and wastewater systems and multi-media assistance in Indian Country through the use of circuit riders.

- (-$12,134.0 / - 22.3 FTE) This program change is a decrease that refocuses agency efforts to core Drinking Water Program activities and requirements.

Statutory Authority:

SDWA; CWA.

Water Quality Protection

Marine Pollution
Program Area: Water Quality Protection
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$9,349.3***	***$9,258.0***	***$4,680.0***	***-$4,578.0***
Total Budget Authority	$9,349.3	$9,258.0	$4,680.0	-$4,578.0
Total Workyears	40.3	31.8	3.0	-28.8

Program Project Description:

EPA's Marine Pollution Program aims to reduce marine litter and improve trash capture activities across the country and supports the Trash Free Waters Program.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. The FY 2021 request includes resources and FTE to expand trash capture and prevention programs across the U.S., tied to water quality and waste management goals. This program will provide support to states and municipalities in coastal regions and on major river systems. Work will focus on high impact activities, such as expanding trash prevention, clean-up, and monitoring programs. Examples include installing trash capture systems in major stormwater outfalls and tributaries of cities and smaller communities using the most cost-effective technologies for each municipality; integrating trash prevention goals and guidelines into state and municipal stormwater management permits and practices; creating a comprehensive clearinghouse of federal, corporate, and philanthropic funding sources to implement place-based trash capture projects on a broad scale; creating next generation social marketing campaigns to reduce litter and improve trash capture; and validating and replicating the most effective tools, projects, metrics, and partnerships across the U.S. for subsequent application in countries with the greatest need.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$12.0) This change is a decrease due to the recalculation of base payroll costs.

- (+$4,675.0 / +3.0 FTE) This program change is an increase to resources and FTE to support the reducing ocean pollution and plastic focus area through expanding trash capture and prevention programs tied to water quality and waste management goals.

- (-$9,241.0 / -31.8 FTE) This program change reduces resources and FTE for the Marine Pollution Program. Remaining resources will focus on trash capture and prevention programs tied to water quality and waste management goals.

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.

Surface Water Protection
Program Area: Water Quality Protection
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$196,146.1***	***$198,431.0***	***$201,799.0***	***$3,368.0***
Total Budget Authority	$196,146.1	$198,431.0	$201,799.0	$3,368.0
Total Workyears	920.3	942.2	962.8	20.6

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.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, 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.

Program Implementation

Water Quality Criteria and Standards. In FY 2021, EPA will continue to develop and publish new or revised water quality criteria reflecting the latest scientific knowledge as required by CWA Section 304. EPA also will continue to review and take action on both state and tribal water quality standards and state lists of impaired waters as required by CWA Section 303. Water quality criteria and standards provide the scientific and regulatory foundation for water quality protection programs under the CWA. EPA will continue to support state and tribal programs by providing scientific water quality criteria information as required by CWA Section 304. EPA also will continue to support states and authorized tribes in adopting and implementing water quality standards in accordance with the water quality standards regulation set forth in 40 CFR part 131.

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.

Biosolids. EPA will continue to implement the biosolids (sewage sludge) program as required under CWA Section 405, including reviewing the biosolids regulations not less often than every two years for the purpose of identifying additional toxic pollutants and promulgating 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.

Impaired Waters Listings and Total Maximum Daily Loads (TMDLs). EPA will work with states and other partners on identifying impaired waters and TMDLs, as required by CWA Section 303(d), and on waterbody restoration plans for listed impaired waterbodies. 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 and plans to ensure they are effective. Support will be provided to control nonpoint sources of pollution and ensure the protection of high-quality waters.

Monitoring and National Aquatic Resource Surveys. 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 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 have implemented Executive Order 13778[181] directing the Administrator of EPA and the Assistant Secretary of the Army for Civil Works to review the 2015 Clean Water Rule (CWR) and publish for notice and comment a proposed rule rescinding or revising the CWR, as appropriate and consistent with law. The Agencies signed the final Navigable Waters Protection Rule in January 2020. EPA and the Department of the Army are developing implementation tools and resources to support the revised definition and have initiated an effort to develop geospatial datasets to assist in identifying jurisdictional waters under the CWA.

Water Quality Certification. In response to Executive Order 13868[182] issued in April 2019, EPA issued guidance to assist states, tribes, other federal agencies, and stakeholders in understanding how to implement and navigate the CWA Section 401 water quality certification process. EPA proposed a rule in August 2019 to update the Section 401 certification regulations and plans to take final action in FY 2020. 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 navigable waters within their borders.

Core Water Quality Programs. In FY 2021, EPA will continue to implement and support the core water quality programs that control point source discharges through permitting and pretreatment programs. The National Pollutant Discharge Elimination System (NPDES) Program under the

[181] For more information, please refer to Executive Order 13778, "Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the 'Waters of the United States' Rule".
[182] For more information, please refer to Executive Order 13868, "Promoting Energy Infrastructure and Economic Growth".

CWA works with states to structure the permit program, support its implementation and better pursue comprehensive protection of water quality on a watershed basis. EPA is requesting additional resources for technical assistance through the use of circuit riders to provide compliance assistance at drinking water and wastewater systems.

Vessel Incidental Discharge Act (VIDA). In December 2018, the VIDA was signed into law establishing a new framework for the regulation of discharges incidental to the normal operation of vessels. EPA will propose a rule in FY 2020 to set national performance standards for approximately 30 different categories of discharges from commercial vessels greater than 79 feet in length, and for ballast water from commercial vessels of all sizes.

Nutrient and Harmful Algal Bloom (HAB) Reductions. The FY 2021 request directs 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. The sources and impacts of nutrient pollution and HABs vary depending on geographic location, and span urban, rural, and coastal landscapes. Still, in many places nonpoint sources are responsible for a significant portion of nutrient loads. Federal regulatory programs do not comprehensively cover these issues, and therefore a more diverse suite of approaches (non-regulatory, incentive-based, partnership, and market approaches), must be used to complement EPA's existing regulatory drivers. Harnessing the wealth of information accrued via federal, state, and local efforts to reduce nutrients, this effective partnership framework engages our state partners at the forefront of environmental protection. The FY 2021 request also directs resources to reduce and better predict HABs, which can be caused by nutrient pollution.

Per- and Polyfluoroalkyl Substances (PFAS.) EPA is requesting additional funding and FTE to assist in meeting our goals under the PFAS Action Plan and the FY 2020-FY 2021 PFAS Agency Priority Goal (APG). The PFAS Action Plan includes the following work: the development of human health and aquatic life criteria; biosolids risk assessments for PFOA and PFOS; development of methods for detecting PFAS in wastewater; collecting information on discharges of PFAS from industrial point sources; and fish tissue monitoring.

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 Clean Water State Revolving Fund Loan (CWSRF) Program, which provides low-interest loans to help finance wastewater treatment facilities and other water quality projects.[183] 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 1987, CWSRF programs have made 41,234 assistance agreements, funding over $138 billion in wastewater infrastructure and other water quality projects. The Program also funds implementation of sections of the America's Water Infrastructure Act of 2018 (AWIA).

[183] For more information, please see https://www.epa.gov/cwsrf.

This program also supports the Clean Watersheds Needs Survey (CWNS). The CWNS is an assessment of the capital investment needed nationwide for publicly-owned wastewater collection and treatment facilities to meet the water quality goals set in the CWA.

The FY 2021 request 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.

Program Oversight/Accountability

States and tribes 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 states in electronically reporting CWA Section 303(d) and Section 305(b) assessment conclusions through the Assessment TMDL Tracking Implementation System (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. In addition, as required under the CWA and Executive Orders 12866, 13638, and 13771, EPA will continue to support cost-benefit analysis for CWA regulatory and deregulatory 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.

In support of the FY 2018 – 2019 APG to accelerate permitting-related decisions, the Agency initiated a Lean process improvement effort in FY 2018 focused on NPDES permit streamlining. This effort identified potential delays in the permitting process, estimated timing of individual permit issuance steps, and the ideal timing for each step. After process improvements were implemented, the backlog of EPA-issued new NPDES permits decreased from 106 to 26 as of the end of FY 2019 and EPA is on track to eliminate the backlog and meet the long-term performance goal to reach all permitting-related decisions within six months by the end of FY 2022.

The FY 2021 request supports the FY 2020 – 2021 APG to accelerate permitting-related decisions and the Agency's continued streamlining efforts focused on establishing clear timelines for permitting processes, ongoing deregulatory efforts, and increasing state delegations. These efforts will continue to advance support for communities and promote economic growth. Looking forward, EPA plans to: implement a national strategy to eliminate the NPDES permit backlog, continue to identify NPDES permits that are delayed due to Endangered Species Act consultation, and improve consultations processes through efforts such as trainings.

Another process improvement effort focused on streamlining the flow of data from EPA labs to state partners and data analysts. Improvements are being tracked through an internal process. The Agency will continue to implement these process improvements and monitor 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 to EPA, 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.

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 2021. At the end of FY 2019, 51 percent of state priority waters were addressed by a TMDL, alternative restoration plan, or protection approach. EPA has continued to support Lean efforts in the states to improve their water quality monitoring, assessment, and reporting processes. EPA continues to support streamlining efforts to allow states to reduce the time they spend on administrative reporting and contribute to improved reporting of the Agency's strategic plan 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.[184] By the end of FY 2019, the number of square miles of watershed areas that contained impaired waters in 2018 was reduced by over 12,700 square miles.

Performance Measure Targets:

(PM NPDES-03) Number of existing EPA-issued NPDES permits in backlog.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target						360	280	200	Permits
Actual					456	373			

(PM SWP-01) Watersheds with surface water not meeting standards (cumulative).

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					No Target Estab-lished	497,728	564,536	555,536	Square Miles
Actual					N/A	493,930			

(PM SWP-02) Watersheds with surface waters not meeting standards because of nutrients (square miles).

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target								192,096	Square Miles
Actual									

(PM TMDL-02) Percentage of priority TMDLs, alternative restoration plans, and protection approaches in place.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target						50	67	84	Percent
Actual			9	14	33.3	51.2			
Numerator			8,822	14,045	33,194	48,544			Square Miles
Denominator			101,141	99,424	99,415	94,806			

[4]Universe is 506,728 square miles of impaired waters as of December 31, 2018. (Footnote updated from *FY 2018-2022 Strategic Plan published February 12, 2018.*)

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$12,756.0) This change is an increase due to the recalculation of base payroll costs.

- (+$2,925.0 / +2.5 FTE) This program change is an increase of resources and FTE to support the nutrient and HAB reductions focus area through the advancement of a more comprehensive approach to addressing nutrient and nonpoint source pollution, which contributes to the development of HABs. This increase will support enhancing market mechanisms, efforts to better predict and respond to HABs, and coordination of surveillance pilots, including through IAs with other federal partners.

- (+$819.0 / +0.7 FTE) This program change is an increase of resources and FTE to support the PFAS focus area including the implementation of the PFAS Action Plan and associated milestones in support of the FY 2020 – 2021 PFAS APG.

- (+$25.0) This program change is an increase to support technical assistance through the use of circuit riders. Efforts are targeted to provide compliance assistance at drinking and wastewater systems and multi-media assistance in Indian Country under the circuit rider focus area.

- (-$13,157.0 / +17.4 FTE) This net program change reduces Surface Water Protection program resources, including the elimination of the WaterSense program. EPA will focus remaining resources on statutory requirements and highest priority work.

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: Congressional Priorities
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	***$0.0***	***$17,700.0***	***$0.0***	***-$17,700.0***
Science & Technology	$4,092.0	$6,000.0	$0.0	-$6,000.0
Total Budget Authority	$4,092.0	$23,700.0	$0.0	-$23,700.0

Program Project Description:

The purpose of this 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 to improve water quality under the Clean Water Act (CWA).

FY 2021 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2021. 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 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$17,700.0) This funding 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).

Office of Inspector General

Table of Contents – Inspector General

Program Projects in IG 417
Audits, Evaluations, and Investigations 418
Audits, Evaluations, and Investigations 419

Environmental Protection Agency
FY 2021 Annual Performance Plan and Congressional Justification

APPROPRIATION: Inspector General

Resource Summary Table
(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Inspector General				
Budget Authority	$39,929.8	$41,489.0	$39,825.0	-$1,664.0
Total Workyears	218.4	227.5	201.4	-26.1

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

Bill Language: Inspector General

For necessary expenses of the Office of Inspector General in carrying out the provisions of the Inspector General Act of 1978, $39,825,000, to remain available until September 30, 2022.

Program Projects in IG
(Dollars in Thousands)

Program Project	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	$39,929.8	$41,489.0	$39,825.0	-$1,664.0
TOTAL IG	**$39,929.8**	**$41,489.0**	**$39,825.0**	**-$1,664.0**

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

Audits, Evaluations, and Investigations

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Inspector General	***$39,929.8***	***$41,489.0***	***$39,825.0***	***-$1,664.0***
Hazardous Substance Superfund	$8,875.9	$11,586.0	$9,747.0	-$1,839.0
Total Budget Authority	$48,805.7	$53,075.0	$49,572.0	-$3,503.0
Total Workyears	268.7	270.0	242.0	-28.0

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 met through the mission of the OIG. The OIG conducts and supervises independent audits, evaluations, and investigations while reviewing existing and proposed legislation and regulations relating to the programs and operations of the Agency; provides leadership and coordination; makes evidence-based policy recommendations for activities designed to promote economy, efficiency and effectiveness; and works to prevent and detect waste, fraud, and abuse in Agency, grantee, and contractor operations.

The OIG activities add value and enhance public trust and safety by keeping the head of the Agency and Congress fully and immediately informed of problems and deficiencies, and the necessity for and progress of corrective actions. The OIG activities also prevent and detect fraud in EPA's programs and operations, including financial fraud, laboratory fraud, and cybercrime. 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.[1] The audit, evaluations and inspection, and investigative services programs are directly supported through the OIG's management and administrative functions of information technology, human resources, human capital, budget, planning and performance, legal advice and counseling, report publishing and communications, and congressional outreach. EPA's OIG plans its work with a focus on identifying and influencing resolution of the Agency's major management challenges and in support of the Agency's strategic goals and objectives in the *FY 2018 - 2022 EPA Strategic Plan.*

[1] For more information, please refer to: https://www.epa.gov/office-inspector-general/epa-oig-organization-profile.

In addition, EPA's Inspector General was designated by Congress in FY 2004 to serve as the Inspector General for the U.S. Chemical Safety and Hazard Investigation Board (CSB) and provides the full range of audit and investigative services specified by the Inspector General Act, as amended. Specifically, the OIG conducts required audits of the CSB's financial statements and of CSB's compliance with the Federal Information Security Management Act. In addition, the OIG performs audits and evaluations of the CSB's programmatic and management activities and follow-up on prior audit recommendations.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 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 and CSB programs and operations protecting human health and the environment, and enhancing safety; conduct audits, evaluations, and investigations that enable EPA and the CSB 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 2021, the OIG will target initiatives supporting EPA's six National Compliance Initiatives; 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 will increase its return on investment to the American public.

The OIG carries out its statutory mission by conducting many types of audits, evaluations, and investigations for both EPA and the CSB. Plans are implemented through audits, evaluations, investigations, inspections, and follow-up reviews 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*. The OIG conducts the following types of assignments focused 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, program performance audits, evaluations and inspections are conducted in the areas of EPA's mission objectives for improving and protecting the environment and public health, including: air; water; land cleanup and waste management; toxics, chemical management, and pollution prevention; and environmental research programs.

The investigative mission of the OIG continues to evolve in conducting criminal, civil, and administrative 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. The OIG investigations are coordinated with the Department of Justice and other federal, state, and local law enforcement entities. These investigations often lead to successful

prosecution and civil judgments wherein there is a recovery and repayment of financial losses. Major areas of investigative focus include: financial fraud, program integrity, threats to the Agency's resources, employee integrity, cyber-crimes, and theft of intellectual or sensitive data.

The ten directorates within the Office of Audit and Evaluation are responsible for independent oversight of EPA and CSB programs and recommending improvement to programs and operations. A significant portion of audit resources will be devoted to statutorily mandated work assessing the financial statements of EPA, as required by the Chief Financial Officers Act and the Accountability of Tax Dollars Act of 2002, respectively. The OIG work also will include assessing the information security practices of EPA as required by the Federal Information Security Management Act. The OIG will examine the delivery and performance of national programs, as well as specific cross-regional and single region or place based issues that represent a risk to public health and the environment in response to stakeholder concerns.

EPA's OIG continues to balance its workload with the capacity of a reduced workforce, while meeting statutorily-mandated requirements and delivering a strong return on investment. Three of the four EPA OIG Annual Performance Goals reported to Congress by way of the Semiannual Report are being exceeded, however, goals were adjusted to align with available resources. 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 2021:

Audits and Evaluations

Sound and Economical Financial Management

- Annual mandated improper payments audit
- Internal controls
- Annual mandated financial statements audits
- Audits of costs claimed by grantees and contractors
- Grant and contract administration
- Maximizing cost efficiencies and process improvement
- Capital investments in information technology, equipment, facilities, and other items
- 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

Efficient Processes and Use of Resources

- Management of the Brownfields Program
- Partnering or 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

Ensuring the Integrity of EPA Information

- Protection from advanced persistent threats to steal/modify data
- 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
- File server security
- Processes for Managing Background Investigations and Plan of Action & Milestones (POA&Ms)
- Annual mandated audit of compliance with the Federal Information Security Modernization Act
- 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

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

Assessing Program Integrity, Results, Oversight, Enforcement

- Evaluation of the Management Audit Tracking System
- Evaluation of the implementation of the Toxic Substances Control Act (TSCA)
- Oversight of Clean Water State Revolving Loan Funds
- Assess EPA's policy, procedures, and internal controls to prevent or reduce improper computer use
- Evaluations of EPA's programs and activities to protect human health and the environment through progress toward air quality goals and compliance with requirements
- Evaluation of EPA's programs and adherence to requirements to protect and restore water that sustains human health and the environment
- Evaluation of EPA's programs, activities, requirements and initiatives to protect human health and the environment through hazardous waste cleanup, waste management, accident prevention and emergency response
- Evaluations of EPA's programs and requirements to protect human health and the environment from chemical risks, including implementation of the TSCA
- Evaluation of controls and processes in EPA's research and development programs that support EPA's core mission to protect human health and the environment

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 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's investigative process is mostly reactive, and the OI performs its proactive work strategically as opportunities and resources allow. Due to the reactive nature of the OI's work, investigations are opened in accordance with priorities set forth in the OIG Strategic Plan for FY 2018 – 2022 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, civil, and administrative 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. Special Agents have been trained as armed law enforcement first responders and are responders in the event of an active shooter or terrorist attack impacting EPA and CSB facilities. 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 often lead to successful 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. Major areas of investigative focus in this oversight include: 1) financial fraud relating 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) 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; 3) threats directed against EPA and CSB employees, facilities, and assets involving threats to the physical assault upon such employees and contractors; 4) program integrity focusing; 5) EPA's OIG hotline, deterrence and oversight focusing on managing EPA's OIG hotline program, which receives complaints, referrals and allegation of fraud, waste, abuse, mismanagement and misconduct involving EPA and the CSB; 6) other investigative activity for

which the focus is on providing support to the OIG program offices and participating in multiagency coordination on urgent matters facing EPA and the Nation.

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 operation.

The Office of Investigations is proposing to realign its Field Operations Directorate by reducing the number of field offices from four to three and realigning the offices that are currently under the purview of the Chicago, Illinois field office to the Atlanta, Georgia and Washington, DC field offices. The employees in the Chicago office will report to the Washington field office and the employees in the Dallas and Kansas City offices, who currently report to the Chicago office, will report to the Atlanta office. Thus, none of the offices will be closed, and each of the three field offices will continue to have a GS-14 supervisor, a GS-15 supervisor, and a team of Special Agents. Once fully implemented and operational, this realignment will improve the efficiency, effectiveness and consistency of OI's operations by allowing the Field Operations Directorate to better oversee its field operations and investigations. The realignment will move OI towards an appropriate manager-to-staff ratio.

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 also conducts reviews and analysis of proposed and existing policies, rules, regulations and legislation to identify vulnerability to waste, fraud and abuse. These reviews 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 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$2,963.0) This change is an increase due to the recalculation of base payroll costs.

- (-$4,627.0 / -26.1 FTE) This net program change is a decrease to address costs associated with the reduction in FTEs and other nonpay changes for all activities across the Office of the Inspector General.

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 $59.3 million ($48.6 million Inspector General; $10.7 million Superfund Transfer)
- The aggregate President's Budget for the operations of the OIG is $49.6 million ($39.8 million Inspector General; $9.8 million Superfund Transfer)
- The portion of the aggregate President's Budget needed for training is $500 thousand ($410 thousand Inspector General; $90 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 $122 thousand ($100 thousand Inspector General; $22 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 2021."

Buildings and Facilities

Table of Contents – Buildings and Facilities

Program Projects in B&F 429
Homeland Security..... 430
Homeland Security: Protection of EPA Personnel and Infrastructure..... 431
Operations and Administration..... 433
Facilities Infrastructure and Operations..... 434

Environmental Protection Agency
FY 2021 Annual Performance Plan and Congressional Justification

APPROPRIATION: Buildings and Facilities
Resource Summary Table
(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Buildings and Facilities				
Budget Authority	$27,276.9	$33,598.0	$39,553.0	$5,955.0
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, $39,553,000, to remain available until expended.

Program Projects in B&F
(Dollars in Thousands)

Program Project	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Homeland Security				
Homeland Security: Protection of EPA Personnel and Infrastructure	$4,259.1	$6,676.0	$6,176.0	-$500.0
Operations and Administration				
Facilities Infrastructure and Operations	$23,017.8	$26,922.0	$33,377.0	$6,455.0
TOTAL B&F	**$27,276.9**	**$33,598.0**	**$39,553.0**	**$5,955.0**

Homeland Security

Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$5,755.6	$5,355.0	$4,986.0	-$369.0
Science & Technology	$410.0	$443.0	$500.0	$57.0
Building and Facilities	***$4,259.1***	***$6,676.0***	***$6,176.0***	***-$500.0***
Hazardous Substance Superfund	$979.3	$1,017.0	$915.0	-$102.0
Total Budget Authority	$11,404.0	$13,491.0	$12,577.0	-$914.0
Total Workyears	8.8	9.2	9.2	0.0

Total workyears in FY 2021 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 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 during 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, EPA will continue to partner with GSA for utilization of the Enterprise Physical Access Control System (ePACS), which enables the Agency to modernize its security infrastructure in compliance with Homeland Security Presidential Directive-12.[1] ePACS allows the Agency to control access in EPA space, including restricted and secure space. EPA also will ensure the following security projects protect occupants and comply with federal mandates for physical security: 1) relocation of Criminal Investigation Division offices in Philadelphia, Pennsylvania; 2) consolidation of the Houston, Texas and Richmond, California labs; 3) fund the second phase of the design of the new entrance for Athens, Georgia; and 4) various closed circuit television and physical security upgrades in response to

[1] For additional information, please refer to: https://www.dhs.gov/homeland-security-presidential-directive-12.

vulnerabilities identified by previously conducted physical security assessments. In addition, the Agency will continue to utilize GSA's Managed Service Office, *USAccess*, for PIV card enrollment and issuance. *USAccess* is a shared services solution which is in line with OMB's Federal IT Shared Services Strategy and the President's Management Agenda.[2]

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$500.0) This program change is a reduction which will extend the schedule for nationwide transition of facility Physical Access Control Systems to the ePACS solution.

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).

[2] For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2018/03/Presidents-Management-Agenda.pdf.

Operations and Administration

Facilities Infrastructure and Operations
Program Area: Operations and Administration
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$321,500.4	$287,595.0	$317,345.0	$29,750.0
Science & Technology	$67,856.9	$65,372.0	$67,908.0	$2,536.0
Building and Facilities	***$23,017.8***	***$26,922.0***	***$33,377.0***	***$6,455.0***
Leaking Underground Storage Tanks	$847.2	$868.0	$796.0	-$72.0
Inland Oil Spill Programs	$577.3	$665.0	$682.0	$17.0
Hazardous Substance Superfund	$82,243.2	$76,473.0	$76,831.0	$358.0
Total Budget Authority	$496,042.8	$457,895.0	$496,939.0	$39,044.0
Total Workyears	329.9	315.4	307.6	-7.8

Total workyears in FY 2021 include 2.1 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. 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 Independence and Security Act of 2007 (EISA); and regulatory mandates associated with soil and water pesticides testing.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. In accordance with the National Strategy for the Efficient Use of Real Property 2015-2020 and HR 4465,[3] the *Federal Assets Sale and Transfer Act of 2016*, the Agency will continue to review its space needs. EPA is implementing a long-term space consolidation plan that will reduce the number of occupied facilities, consolidate space within remaining facilities, and reduce square footage wherever practical. B&F resources support facility-related construction and the repair and improvement (R&I) of EPA's aging real estate inventory. Good stewardship practices demand 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.

[3] For additional information, please refer to: https://www.congress.gov/bill/114th-congress/house-bill/4465, *Federal Assets Sale and Transfer Act of 2016.*

Through master planning and nationwide efforts to use space more efficiently, EPA identifies B&F projects to be conducted each fiscal year. These projects support the long-term conditions and efficiency of EPA facilities. Further, the need for B&F resources will continue to increase to comply with GSA leasing practices requiring agencies to pay for B&F projects including sustainable features[4] as tenant improvements (TI) or up front and ongoing project costs. This requirement significantly increases TI cost for new leases while resources are needed to consolidate space and move into new locations to reduce the Agency's footprint in accordance with the *Federal Asset Sale and Transfer Act of 2016*.

EPA is working toward the long-term performance goal in the *FY 2018 – 2022 EPA Strategic Plan* to reduce unused office and warehouse space by 850,641 square feet nationwide by September 30, 2022. In FY 2019, EPA released 128,150 square feet of unused office and warehouse space. In FY 2021, the Agency will continue to explore opportunities to reconfigure EPA's workplaces with the goal of reducing long-term rent costs. Space consolidation and reconfiguration enables EPA to reduce its footprint to create a more efficient, collaborative, and technologically sophisticated workplace. Planned consolidations will allow EPA to continue to release an expected 319,693 square feet of space in FY 2021. However, even if modifications are kept to a minimum, each move requires B&F funding.

The FY 2021 request also includes resources for ongoing projects that will provide critical maintenance for aging laboratory facilities and are key to ensuring that the Agency has access to preeminent laboratory science. These projects maintain a safe workplace, provide for high quality science, support agency priorities, and advance the Agency's mission. Delaying essential repairs results in the deterioration of EPA's facilities, which increases long-term repair costs and presents safety risks. 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 in line with the Laboratory Study completed in 2014.[5]

In FY 2021, the Agency proposes to continue or initiate space optimization projects with the potential for the greatest long-term cost and energy savings, including but not limited to the following:

- **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. As a result of this co-location, EPA expects to save $1.8 million annually in lease and facility expenses and reduce agency lab space by approximately 41,000 square feet.

[4] Many of these features are required by EISA or executive orders.
[5] 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.

- **Consolidating Operations in Federal Triangle.** EPA is in the process of consolidating office space in Washington, D.C. to accommodate employees relocated from the Potomac Yard facility. The release of the Potomac Yard facility will reduce the space footprint by 264,935 square feet and avoid over $11 million in annual lease costs.

- **Optimizing space at the Athens, Georgia laboratory.** EPA has begun to invest in the design for the optimized layout for the Athens lab prior to reducing its space footprint. Construction will cost an estimated $3 million in FY 2020 and another $7 million in FY 2021.

In FY 2021, EPA will continue its phased approach to accomplish major B&F projects across the country including those that involve the replacement of mechanical systems nearing the end of their useful life that also will ultimately result in energy savings. Using this phased approach, the Agency completed the first phase of the Athens, Georgia consolidation project in FY 2019. Completion of phase one created space for staff to relocate out of the EPA-owned lab in preparation for renovation of the entire lab facility.

Performance Measure Targets:

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

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$6,455.0) This program change increases funding for the Agency's planned progress in regional space optimization and laboratory upgrade projects in Ada, OK and Athens, GA, as well as space consolidations at Washington, D.C. headquarters facilities.

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).

Hazardous Substance
Superfund

Table of Contents – Superfund

Program Projects in Superfund 439
Indoor Air and Radiation 442
Radiation: Protection 443
Audits, Evaluations, and Investigations 445
Audits, Evaluations, and Investigations 446
Compliance 452
Compliance Monitoring 453
Enforcement 455
Criminal Enforcement 456
Environmental Justice 458
Forensics Support 460
Superfund: Enforcement 462
Superfund: Federal Facilities Enforcement 465
Homeland Security 467
Homeland Security: Preparedness, Response, and Recovery 468
Homeland Security: Protection of EPA Personnel and Infrastructure 471
Information Exchange / Outreach 473
Exchange Network 474
IT/ Data Management/ Security 477
Information Security 478
IT / Data Management 481
Legal / Science / Regulatory / Economic Review 484
Alternative Dispute Resolution 485
Legal Advice: Environmental Program 486
Operations and Administration 488
Acquisition Management 489
Central Planning, Budgeting, and Finance 492
Facilities Infrastructure and Operations 495
Financial Assistance Grants / IAG Management 498
Human Resources Management 500

Research: Sustainable Communities **503**
Research: Sustainable and Healthy Communities 504
Research: Chemical Safety and Sustainability **508**
Health and Environmental Risk Assessment 509
Superfund Cleanup **513**
Superfund: Emergency Response and Removal 514
Superfund: EPA Emergency Preparedness 517
Superfund: Federal Facilities 519
Superfund: Remedial 522
Superfund Special Accounts **526**
Superfund Special Accounts **527**

APPROPRIATION: Hazardous Substance Superfund
Resource Summary Table

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Hazardous Substance Superfund				
Budget Authority	$1,209,683.4	$1,184,755.0	$1,078,611.0	-$106,144.0
Total Workyears	2,519.4	2,636.5	2,593.6	-42.9

*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, $1,078,611,000, to remain available until expended, consisting of such sums as are available in the Trust Fund on September 30, 2020, as authorized by section 517(a) of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and up to $1,078,611,000 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, $9,747,000 shall be paid to the "Office of Inspector General" appropriation to remain available until September 30, 2022, and $19,075,000 shall be paid to the "Science and Technology" appropriation to remain available until September 30, 2022.

Program Projects in Superfund

(Dollars in Thousands)

Program Project	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Indoor Air and Radiation				
Radiation: Protection	$1,768.6	$1,985.0	$2,122.0	$137.0
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	$8,875.9	$11,586.0	$9,747.0	-$1,839.0
Compliance				
Compliance Monitoring	$1,313.8	$995.0	$1,004.0	$9.0
Enforcement				

Program Project	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Criminal Enforcement	$7,492.9	$7,645.0	$8,479.0	$834.0
Environmental Justice	$662.2	$633.0	$0.0	-$633.0
Forensics Support	$1,402.3	$1,145.0	$1,312.0	$167.0
Superfund: Enforcement	$135,626.7	$152,591.0	$162,504.0	$9,913.0
Superfund: Federal Facilities Enforcement	$6,046.9	$6,361.0	$7,330.0	$969.0
Subtotal, Enforcement	$151,231.0	$168,375.0	$179,625.0	$11,250.0
Homeland Security				
Homeland Security: Preparedness, Response, and Recovery	$31,526.7	$31,599.0	$33,454.0	$1,855.0
Homeland Security: Protection of EPA Personnel and Infrastructure	$979.3	$1,017.0	$915.0	-$102.0
Subtotal, Homeland Security	$32,506.0	$32,616.0	$34,369.0	$1,753.0
Information Exchange / Outreach				
Exchange Network	$1,424.8	$1,328.0	$1,293.0	-$35.0
IT / Data Management / Security				
Information Security	$598.9	$693.0	$5,082.0	$4,389.0
IT / Data Management	$13,755.5	$13,792.0	$13,874.0	$82.0
Subtotal, IT / Data Management / Security	$14,354.4	$14,485.0	$18,956.0	$4,471.0
Legal / Science / Regulatory / Economic Review				
Alternative Dispute Resolution	$573.3	$710.0	$0.0	-$710.0
Legal Advice: Environmental Program	$515.0	$543.0	$608.0	$65.0
Subtotal, Legal / Science / Regulatory / Economic Review	$1,088.3	$1,253.0	$608.0	-$645.0
Operations and Administration				
Central Planning, Budgeting, and Finance	$23,772.7	$21,971.0	$22,462.0	$491.0
Facilities Infrastructure and Operations	$82,243.2	$76,473.0	$76,831.0	$358.0
Acquisition Management	$18,593.2	$20,533.0	$22,982.0	$2,449.0
Human Resources Management	$6,163.7	$6,548.0	$5,704.0	-$844.0
Financial Assistance Grants / IAG Management	$2,517.7	$2,580.0	$2,903.0	$323.0
Subtotal, Operations and Administration	$133,290.5	$128,105.0	$130,882.0	$2,777.0
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$11,004.7	$16,463.0	$11,448.0	-$5,015.0
Research: Chemical Safety for Sustainability				
Health and Environmental Risk Assessment	$2,864.9	$12,824.0	$6,159.0	-$6,665.0

Program Project	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Superfund Cleanup				
Superfund: Emergency Response and Removal	$215,077.1	$189,306.0	$170,748.0	-$18,558.0
Superfund: EPA Emergency Preparedness	$7,679.9	$7,636.0	$7,700.0	$64.0
Superfund: Federal Facilities	$22,544.5	$21,125.0	$21,621.0	$496.0
Superfund: Remedial	$604,659.0	$576,673.0	$482,329.0	-$94,344.0
Subtotal, Superfund Cleanup	$849,960.5	$794,740.0	$682,398.0	-$112,342.0
TOTAL Superfund	**$1,209,683.4**	**$1,184,755.0**	**$1,078,611.0**	**-$106,144.0**

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

Indoor Air and Radiation

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$10,880.5	$7,992.0	$2,470.0	-$5,522.0
Science & Technology	$2,794.7	$1,781.0	$1,047.0	-$734.0
Hazardous Substance Superfund	***$1,768.6***	***$1,985.0***	***$2,122.0***	***$137.0***
Total Budget Authority	$15,443.8	$11,758.0	$5,639.0	-$6,119.0
Total Workyears	57.4	53.8	25.0	-28.8

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 risk of radiation to include support of removal actions as needed.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018–2022 EPA Strategic Plan*. In FY 2021, EPA's National Analytical Radiation Environmental Laboratory in Montgomery, Alabama, and National Center for Radiation Field Operations 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 Federal Facility sites.

More specifically, these organizations focus on providing 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 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$112.0) This change is an increase due to the recalculation of base payroll costs.

- (-$26.0) This change to fixed and other costs is a reduction due to the recalculation of lab utilities.

- (+$51.0) This program change is an increase to radiation analytical and technical support.

Statutory Authority:

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

Audits, Evaluations, and Investigations

Audits, Evaluations, and Investigations
Program Area: Audits, Evaluations, and Investigations
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Inspector General	$39,929.8	$41,489.0	$39,825.0	-$1,664.0
Hazardous Substance Superfund	***$8,875.9***	***$11,586.0***	***$9,747.0***	***-$1,839.0***
Total Budget Authority	$48,805.7	$53,075.0	$49,572.0	-$3,503.0
Total Workyears	268.7	270.0	242.0	-28.0

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 met through the mission of the OIG. The OIG conducts and supervises independent audits, evaluations, and investigations while reviewing existing and proposed legislation and regulations relating to the programs and operations of the Agency; provides leadership and coordination; makes evidence-based policy recommendations for activities designed to promote economy, efficiency and effectiveness; and works to prevent and detect waste, fraud, and abuse in Agency, grantee, and contractor operations of the Agency's Superfund Program.

The OIG activities add value and enhance public trust and safety by keeping the head of the Agency and Congress fully and immediately informed about problems and deficiencies, and the necessity for and progress of corrective actions. The OIG activities also prevent and detect fraud in EPA's programs and operations, including financial fraud, laboratory fraud, and cybercrime. 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.[1] The audit, and inspection and investigative services programs are directly supported through the OIG's management and administrative functions of information technology, human resources, human capital, budget, planning and performance, legal advice and counseling, report publishing and communications, and congressional outreach. EPA's OIG plans its work with a focus on identifying and influencing resolution of the Agency's major management challenges in support of the Agency's strategic goals and objectives in the *FY 2018 - 2022 EPA Strategic Plan.*

[1] For more information, please refer to: https://www.epa.gov/office-inspector-general/epa-oig-organization-profile.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 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 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 2021, the OIG will target initiatives supporting EPA's six National Compliance Initiatives; 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.

The OIG carries out its statutory mission by conducting many types of audits, evaluations, and investigations for both EPA and the U.S. Chemical Safety and Hazard Investigation Board (CSB). Plans are implemented through audits, evaluations, investigations, inspections, and follow-up reviews 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*.

The OIG conducts the following types of assignments focused 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, program performance audits, evaluations, and inspections will be conducted in the areas of EPA's mission objectives for improving and protecting the environment and public health, including: air; water; land cleanup and waste management; toxics, chemical management, and pollution prevention; and environmental research programs via reviews of Superfund and other land issues.

The investigative mission of the OIG continues to evolve in conducting criminal, civil, and administrative investigations into fraud and serious misconduct within EPA's Superfund Program and operations that undermine the organization's integrity and public trust or create an imminent risk or danger. The OIG investigations are coordinated with the Department of Justice and other federal, state, and local law enforcement entities. These investigations often lead to successful prosecution and civil judgments wherein there is a recovery and repayment of financial losses. Major areas of investigative focus include: financial fraud, program integrity, threats to the Agency's resources, employee integrity, cyber-crimes, and theft of intellectual or sensitive data.

EPA's OIG continues to balance its workload with the capacity of a reduced workforce, while meeting statutorily-mandated requirements and delivering a strong return on investment. 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 2021:

Audits and Evaluations

The OIG audits and program evaluations and inspections related to Superfund 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: assessing 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 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:

- Superfund's human health and environmental indicators (Human Health Exposure Under Control and Groundwater Migration Under Control) and its key measure (Sites Ready for Anticipated Use) and optimization of remedies
- EPA's progress in ensuring private party Superfund liabilities are adequately covered by sufficient financial assurance mechanisms
- EPA Progress Implementing Recommendations for Superfund Improvement in the 2017 Superfund Task Force Report
- Superfund portion of EPA's financial statement and Federal Information Security Modernization Act (FISMA) audits to include sampling, monitoring, communication, and opportunities for cleanup efficiencies
- Oversight of Superfund remedial activities under state contracts and assistance agreements
- Assess the effectiveness of actions taken as a result of the 2017 Superfund Task Force Report
- The OIG also will 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's investigative process is mostly reactive, and the OI performs its proactive work strategically as opportunities and resources allow. Due to the reactive nature of the OI's work, investigations are opened in accordance with priorities set forth in the OIG Strategic Plan for FY 2018 –2022 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, civil, and administrative 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. Special Agents have been trained as armed law enforcement first responders and are responders in the event of an active shooter or terrorist attack impacting EPA and CSB facilities. 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 often lead to successful 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. 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) violent or criminal threats directed against Superfund Program employees or facilities; 5) criminal conduct or serious administrative misconduct by EPA employees involved in the Superfund Program; and 6) intrusions into and attacks against EPA's network supporting Superfund Program data, as well as incidents of computer misuse and theft of intellectual property or sensitive/proprietary Superfund data. Special attention will be directed towards identifying the tactics, techniques, and

procedures being utilized by cyber criminals to reduce vulnerabilities and infractions, enhance collective defense efforts, and adapt to the evolving sophistication of the cyber threat landscape.

Finally, the OI often makes observations or "lessons learned" for EPA's management 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.

The Office of Investigations is proposing to realign its Field Operations Directorate by reducing the number of field offices from four to three and realigning the offices that are currently under the purview of the Chicago, Illinois field office to the Atlanta, Georgia and Washington, DC field offices. The employees in the Chicago office will report to the Washington field office and the employees in the Dallas and Kansas City offices, who currently report to the Chicago office, will report to the Atlanta office. Thus, none of the offices will be closed, and each of the three field offices will continue to have a GS-14 supervisor, a GS-15 supervisor, and a team of Special Agents. Once fully implemented and operational, this realignment will improve the efficiency, effectiveness and consistency of OI's operations by allowing the Field Operations Directorate to better oversee its field operations and investigations. The realignment will move OI towards an appropriate manager-to-staff ratio.

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 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 also conducts reviews and analysis of proposed and existing policies, rules, regulations and legislation pertaining to the Superfund Program to identify vulnerability to waste, fraud and abuse. These reviews 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 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$314.0) This change is an increase due to the recalculation of base payroll costs.

- (-$2,153.0 / -1.9 FTE) This net program change is a decrease to address costs associated with the reduction in FTEs and other nonpay changes for all activities across the Office of the Inspector General.

Statutory Authority:

Inspector General Act of 1978; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 111(k).

Inspector General Reform Act:

The following information is provided pursuant to the requirements of the Inspector General Reform Act:

- The aggregate budget request from the Inspector General for the operations of the OIG is $59.3 million ($48.6 million Inspector General; $10.7 million Superfund Transfer)
- The aggregate President's Budget for the operations of the OIG is $49.6 million ($39.8 million Inspector General; $9.8 million Superfund Transfer)
- The portion of the aggregate President's Budget needed for training is $500 thousand ($410 thousand Inspector General; $90 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 $122 thousand ($100 thousand Inspector General; $22 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 2021."

Compliance

Compliance Monitoring
Program Area: Compliance
Goal: More Effective Partnerships
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$100,132.8	$101,665.0	$95,649.0	-$6,016.0
Inland Oil Spill Programs	$82.8	$139.0	$0.0	-$139.0
Hazardous Substance Superfund	***$1,313.8***	***$995.0***	***$1,004.0***	***$9.0***
Total Budget Authority	$101,529.4	$102,799.0	$96,653.0	-$6,146.0
Total Workyears	447.1	453.9	427.7	-26.2

Program Project Description:

The Compliance Monitoring Program is a key component of EPA's Compliance Assurance Program that allows the controlling regulatory authority to detect noncompliance. The Program also promotes compliance with the Nation's environmental laws. The states and EPA use compliance monitoring tools and activities to identify whether regulated entities are in compliance with environmental laws enacted by Congress, as well as applicable regulations and permit conditions. In addition, compliance monitoring activities, such as investigations, are conducted to determine whether conditions exist that may present imminent and substantial endangerment to human health and the environment. The Program also focuses on providing information and system support for monitoring compliance with Superfund-related environmental regulations and contaminated site cleanup agreements. The Agency also ensures the security and integrity of its compliance information systems. Superfund-related enforcement activities are tracked in the Agency's Integrated Compliance Information System. Electronic tracking of its Superfund enforcement work allows EPA to better ensure that its enforcement resources are going to address the most significant concerns and facilitates transparency.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, EPA will support a variety of tools and activities for states and EPA to identify the compliance status of regulated entities with environmental laws enacted by Congress.

Performance Measure Targets:

(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target	17,000	15,500	15,500	14,000	10,000	10,000	10,000	10,000	Inspections & Evaluations
Actual	16,000	15,400	13,500	11,800	10,600	10,300			

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$87.0) This change is an increase due to the recalculation of base payroll costs.
- (-$78.0) This net program change reflects adjustments to funding associated with system support.

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: Greater Certainty, Compliance, and Effectiveness
Objective(s): Compliance with the Law

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$46,342.0	$47,635.0	$46,627.0	-$1,008.0
Hazardous Substance Superfund	***$7,492.9***	***$7,645.0***	***$8,479.0***	***$834.0***
Total Budget Authority	$53,834.9	$55,280.0	$55,106.0	-$174.0
Total Workyears	234.6	256.7	220.6	-36.1

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.

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 the Department of Justice's Environmental Crimes Section. In FY 2019, the conviction rate for criminal defendants charged as a result of EPA criminal enforcement investigations was 98 percent.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, EPA will continue to streamline its Criminal Enforcement Program and enforce environmental laws to correct noncompliance and promote cleanup of contaminated sites. The Agency will perform targeted investigations of violations of environmental statutes and associated violations of Title 18 of the United States Code to protect public health and the environment. The Program will focus its resources on the most egregious cases (e.g., significant human health, environmental, and deterrent impacts), while balancing its overall case load.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$347.0) This change is an increase due to the recalculation of base payroll costs.

- (+$487.0) This net program change reflects a focus on the most egregious cases and provides additional support for the Agency's investigations of environmental crimes.

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).

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$5,033.5	$9,554.0	$2,729.0	-$6,825.0
Hazardous Substance Superfund	***$662.2***	***$633.0***	***$0.0***	***-$633.0***
Total Budget Authority	$5,695.7	$10,187.0	$2,729.0	-$7,458.0
Total Workyears	29.1	34.9	4.0	-30.9

Program Project Description:

EPA's Environmental Justice (EJ) Program fosters environmental and public health and sustainability in communities disproportionately burdened by pollution by integrating and addressing EJ issues in our programs and policies. The Superfund portion of this program focuses on issues that affect low income and minority 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. The Environmental Justice Program at EPA is led and supported by the Office of Environmental Justice.

FY 2021 Activities and Performance Plan:

Superfund resources and FTE are proposed for elimination for this program in FY 2021. EJ work impacting the Agency will be incorporated into policy work within EPA's Office of the Administrator.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$633.0 / -3.5 FTE) This funding change proposes to eliminate Superfund specific funding for the Environmental Justice Program. Environmental Justice work will continue in the Environmental Programs and Management appropriation.

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).

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Science & Technology	$11,534.7	$13,592.0	$11,723.0	-$1,869.0
Hazardous Substance Superfund	***$1,402.3***	***$1,145.0***	***$1,312.0***	***$167.0***
Total Budget Authority	$12,937.0	$14,737.0	$13,035.0	-$1,702.0
Total Workyears	57.4	68.9	52.1	-16.8

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 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.[2] The NEIC maintains a sophisticated chemistry and physical science laboratory, and a corps of highly trained inspectors and scientists with expertise across media. The NEIC works closely with EPA's Criminal Investigation Division to provide technical support (e.g., sampling, analysis, consultation and testimony) to criminal investigations. The NEIC also works closely with EPA's programs to provide technical assistance, consultation, on-site inspection, investigation, and case resolution services in support of the Agency's Superfund Enforcement Program.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, the NEIC will continue to streamline its forensics work and identify enhancements to our sampling and analytical methods, using existing technology. In support of that effort, NEIC will build on its progress using the EPA Lean Management System 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. The results of these efforts will inform EPA's work in FY 2021 and beyond.

The Forensics Support Program will continue to provide expert scientific and technical support for EPA's criminal and civil enforcement efforts. The Program will continue to focus its work on

[2] *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.

collecting and analyzing materials to characterize contamination, and attribute it to individual sources and/or facilities. The laboratory will continue to coordinate its support for the Superfund Program with the Agency's Research and Development Program and Land and Emergency Management Program.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$23.0) This change is an increase due to the recalculation of base payroll costs.
- (+$107.0 / -0.5 FTE) This net program change reflects a focus on analyzing material to attribute it to individual sources or facilities.
- (+$37.0) This change to fixed and other costs is an increase due to the recalculation of rent, utilities, and security or lab fixed 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 statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Hazardous Substance Superfund	***$135,626.7***	***$152,591.0***	***$162,504.0***	***$9,913.0***
Total Budget Authority	$135,626.7	$152,591.0	$162,504.0	$9,913.0
Total Workyears	699.0	771.3	745.3	-26.0

Program Project Description:

The Superfund Enforcement Program protects communities by ensuring that responsible parties conduct cleanups, preserving federal dollars for sites where there are no viable contributing parties. EPA's Superfund Enforcement Program ensures prompt site cleanup and reuse by maximizing the participation of liable and viable parties in performing and paying for cleanups. In both the Superfund Remedial and Superfund Emergency Response and Removal Programs, the Superfund Enforcement Program obtains potentially responsible parties' commitments to perform and pay for cleanups through civil judicial and administrative site actions. The Superfund Enforcement Program works closely with the Superfund Program and the U.S. Department of Justice (DOJ) to combine litigation, legal, and technical skills to bring enforcement actions and address emerging issues.

The Superfund Enforcement Program:

- 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;
- ensures that responsible parties cleanup sites to reduce direct human exposure to hazardous substances, thereby providing long-term human health protections and making contaminated properties available for reuse;
- negotiates site cleanup agreements with Potentially Responsible Parties (PRPs) and, where negotiations fail, either initiates enforcement actions to require cleanup or initiates cost recovery if EPA expends Superfund appropriated dollars to remediate the sites; and
- addresses liability concerns of parties who want to clean up and reuse Superfund sites.

In 2019, the Superfund Enforcement Program secured private party commitments for cleanup and cost recovery and billed for oversight amounts totaling more than $961 million. The use of Superfund enforcement tools resulted in cleanup and redevelopment at 160 private party sites in 2019.

Special accounts are created when funds are received as part of a settlement to fund a site cleanup. Funds received in settlements with PRPs are 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 2019, EPA created 69 special accounts and collected $374.4 million for response work. The Agency disbursed or obligated $236.7 million from special accounts for response work (excluding reclassifications).

Furthermore, the Superfund Enforcement Program assists the Superfund Program to ensure that contaminated sites across the country are remediated to protect human health and the environment and returned to beneficial use as expeditiously as possible.

The Superfund Enforcement Program continues to work to encourage and facilitate PRPs' expeditious and thorough cleanup of sites, create oversight efficiencies and promote the redevelopment and reuse of sites by encouraging PRPs to invest in reuse outcomes. In addition, the Superfund Enforcement Program works to encourage new private investment in the cleanup and reuse of sites by optimizing tools to encourage third-party investment. EPA also works to ensure that required, 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, the Agency will prioritize its efforts on the most significant sites in terms of environmental impact (particularly those that may present an immediate risk) and on increasing private party funding of cleanups. 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.

DOJ support 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 enter into 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.

Cost Recovery Support

In FY 2020, EPA will continue implementing the e-Recovery system to replace legacy systems for cost recovery support. This effort will modernize the system and assist with the Agency's burden reduction efforts. In FY 2021, the Agency will continue to standardize and streamline the financial management processes for the financial management aspects of Superfund cost recovery and the collection of related 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 2019, the Agency collected $219.7 million in cost recoveries, of which $73.3

million were returned to the Superfund Trust Fund and $146.4 million were deposited in site-specific, interest bearing special accounts.[3]

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$11,647.0) This change is an increase due to the recalculation of base payroll costs.

- (-$1,734.0 / -26.0 FTE) This net program change reflects a focus on sites with significant risks, securing private party funding for cleanups, and a reduction in resources for Superfund cost recovery to be offset in part by streamlining those functions.

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).

[3] In FY 2019, the Agency earned approximately $36.9 million in interest on the total special account funds invested in the Superfund Trust Fund.

Superfund: Federal Facilities Enforcement
Program Area: Enforcement
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Compliance with the Law

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Hazardous Substance Superfund	***$6,046.9***	***$6,361.0***	***$7,330.0***	***$969.0***
Total Budget Authority	$6,046.9	$6,361.0	$7,330.0	$969.0
Total Workyears	34.5	40.9	37.4	-3.5

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) 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 contain environmental contamination such as hazardous wastes, unexploded ordnance, radioactive wastes, or 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 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 2021 Activities and Performance Plan:

Work under this program directly supports Goal 3/Objective 3.1, Compliance with the Law in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, EPA will 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 or have the potential for redevelopment. EPA also will negotiate FFAs for federal facility sites on the NPL, monitor FFAs for compliance and resolve formal disputes, take enforcement actions at priority sites, and implement the Superfund Task Force recommendations[4] to expedite cleanup and redevelopment of federal facility sites. EPA will continue to seek ways to improve its engagement with other federal agencies and states, emphasizing protective, timely cleanups and recognizing site reuse opportunities.

[4] For additional information, please refer to: https://www.epa.gov/superfund/superfund-task-force-recommendations.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$1,627.0) This change is an increase due to the recalculation of base payroll costs.
- (-$658.0 / -3.5 FTE) This net program change reflects a focus on facility clean ups and redevelopment at 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) § 120.

Homeland Security

Homeland Security: Preparedness, Response, and Recovery
Program Area: Homeland Security
Goal: A Cleaner, Healthier Environment
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Science & Technology	$20,492.7	$23,593.0	$25,542.0	$1,949.0
Hazardous Substance Superfund	***$31,526.7***	***$31,599.0***	***$33,454.0***	***$1,855.0***
Total Budget Authority	$52,019.4	$55,192.0	$58,996.0	$3,804.0
Total Workyears	115.3	124.1	127.1	3.0

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 program 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/implementation for responders, which establishes and sustains coordination with states, local communities, tribes, and other federal agencies. The Agency also provides technical assistance to other federal agencies, including DHS, the Department of Defense (DOD), the Department of Justice (DOJ), and the Department of Health and Human Services, with expertise in 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, 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 interagency workgroups.

- Provide expertise on 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.

- Develop site characterization, decontamination, waste management, and clearance methods and strategies for priority chemical, biological, and radiological threats that enable remediation while reducing time and cost and promote site reoccupation.

- Continue the development of sample collection protocols and analysis methods for inclusion in the Environmental Sampling & Analytical Methods (ESAM)[5] on-line tool. The ESAM detection and 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 detecting chemical and radiological vapors, plumes, and clouds with real-time data delivery.

- Assist with site characterization during a significant CBRN incident, when EPA mobile lab capabilities are needed. EPA will maintain mobile lab capabilities with support of EPA's Portable High-Throughput Integrated Identification Systems (PHILIS) units. PHILIS can be deployed to sites for high volume, quick turnaround analyses of chemical and biological capacity and capability.

[5] For more information, please see: https://www.epa.gov/esam.

- Develop a study to begin formally planning for the next generation of ASPECT and PHILIS and through a www.challenge.gov initiative to crowdsource innovative ideas allowing the public to contribute creative technology concepts for the replacement technology of ASPECT.

- 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 (IMTs). These 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:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$2,027.0) This change is an increase due to the recalculation of base payroll costs.

- (+$500.0) This program change is an increase to study and formally plan for the potential replacement of ASPECT and PHILIS.

- (+$1,000.0) This program change is an increase for a www.challenge.gov initiative to crowdsource replacement technology ideas for ASPECT.

- (-$1,672.0) This net program change will result in prioritizing exercises and training held with federal, state, and local partners. In addition, within this change, there is a reduction in resources for research related to analysis of chemical agents and decision support for chemical agent remediation of chemical, biological, radiological, or nuclear (CBRN) agents in the environment.

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: Greater Certainty, Compliance, and Effectiveness
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$5,755.6	$5,355.0	$4,986.0	-$369.0
Science & Technology	$410.0	$443.0	$500.0	$57.0
Building and Facilities	$4,259.1	$6,676.0	$6,176.0	-$500.0
Hazardous Substance Superfund	***$979.3***	***$1,017.0***	***$915.0***	***-$102.0***
Total Budget Authority	$11,404.0	$13,491.0	$12,577.0	-$914.0
Total Workyears	8.8	9.2	9.2	0.0

Total workyears in FY 2021 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 the Agency be able to do so with limited staffing and without access to resources available during normal activities.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, EPA will undertake the following:

- 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 performs an in-person biannual review of EPA's COOP Program and provides the results to the Administrator and to the Executive Office of the President.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$102.0) This program change reduces funding for COOP assessment and updates.

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).

Information Exchange / Outreach

Exchange Network
Program Area: Information Exchange / Outreach
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Streamline and Modernize

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$17,090.3	$15,184.0	$12,328.0	-$2,856.0
Hazardous Substance Superfund	***$1,424.8***	***$1,328.0***	***$1,293.0***	***-$35.0***
Total Budget Authority	$18,515.1	$16,512.0	$13,621.0	-$2,891.0
Total Workyears	27.8	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 the E-Enterprise business 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)[6] 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.

These shared data services catalog entities routinely referenced by EPA and EN partners, 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.4, Streamline and Modernize in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, EPA will continue to support core functions for the EN IT systems, which is in line with the President's Management Agenda for IT modernization and data, accountability, and transparency.[7]

[6] For more information on the Central Data Exchange, please visit: http://www.epa.gov/cdx/.
[7] For additional information, please refer to: https://www.whitehouse.gov/omb/management/pma/.

EPA aims to reduce burden and avoid costs when improving IT. The Agency has provisioned 70 Virtual Exchange Services (VES) or virtual nodes to facilitate large-scale data transactions supporting 19 states and over 88 tribal partners, with another 20 anticipated by the end of FY 2020. The electronic signature service supports 62 partner exchanges to date and six more are expected in FY 2020. EPA estimates implementation of these services resulted in cost avoidance of approximately $2.3 million for the 19 partner states, who otherwise would have had to build and manage exchange services independently. EPA will continue to carry out the baseline support for the adoption and onboarding of VES and associated services for EPA and its partners.

In FY 2021, EPA will continue to maintain the EPA Federal Regulation Finder, a public-facing digital service that was deployed to the E-Enterprise Portal[8] in Q2 of FY 2020. The EPA Federal Regulation Finder integrates multiple shared services into a discovery tool that helps industry and the public to more easily identify potentially applicable regulations. It integrates three catalogs: a substance catalog (Substance Registry Services [SRS]); an Enterprise Vocabulary; and a catalog of federal statutes and regulations (Laws and Regulations Services) to enable a user to search for laws and regulations by substance or keyword. In FY 2021, enhancements to the EPA Federal Regulation Finder may include expanding this tool to allow users to search in the North American Industrial Classification System and establishing additional shared data services, such as zip codes, countries, and counties, so that EPA systems no longer must manage these data, instead relying on the centralized services.

Multiple performance efforts also use exchange services and registries (shared data services) to improve data quality in EPA, state, and tribal program data, and to reduce reporting burden on the regulated community. EPA will continue to promote the adoption of the Tribal Identification (TRIBES) shared service by tracking its use by EPA systems that collect tribal names. In FY 2019, EPA increased the number of EPA systems using TRIBES services by 58 percent, from 12 to 19 systems.

EPA also 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 50,000 users per month; many of these users visit SRS to understand regulatory information about chemicals. SRS also receives between 20,000 and 140,000 web service hits per month (depending on reporting cycles), mostly by EPA systems that have incorporated the web services into their online reporting forms. Priorities for EPA registries include improving registry technologies by moving them into an open-source platform so they are cloud-ready. In FY 2021, EPA will maintain the registries at FY 2020 levels, and selectively move them into open-source platforms. EPA will 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.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

[8] For additional information, please refer to: https://www.e-enterprise.gov/workbench.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$35.0) This net program change is an adjustment that streamlines quality assurance of registries; refocuses modernization efforts; and reduces the collection and exchange of environmental data with states, tribes, and regulated entities.

Statutory Authority:

Federal Information Security Management Act (FISMA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); 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
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$7,649.5	$7,593.0	$14,012.0	$6,419.0
Hazardous Substance Superfund	***$598.9***	***$693.0***	***$5,082.0***	***$4,389.0***
Total Budget Authority	$8,248.4	$8,286.0	$19,094.0	$10,808.0
Total Workyears	18.7	13.1	12.8	-0.3

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: policy, procedure, and practice management; information security awareness, training, and education; governance and oversight; risk-based weakness management; operational security management; and incident detection, response, and recovery.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. Cybersecurity is a serious challenge to our nation's security and economic prosperity. Effective information security requires vigilance and the ability to adapt to new challenges every day. As reported to the Department of Homeland Security (DHS), in FY 2019, EPA experienced 194 confirmed incidents against its systems. As a result, the Agency has identified significant gaps in its ability to detect, respond to, protect against, and recover from attacks, which increase the risk to compromise agency information.

In response to DHS's *Cybersecurity Risk Management Assessment*, EPA will continue to leverage capabilities through the Continuous Diagnostics and Mitigation (CDM) Program. EPA will focus on closing existing gaps by identifying and alerting unauthorized hardware and software into the Agency's networks and systems, checking outbound traffic for unauthorized exfiltration, and assessing systems with a Security Content Automation Protocol. In addition to protecting EPA information assets, CDM will help the Agency identify and respond to federal-wide cybersecurity threats and incidents quicker and more efficiently.

EPA's cost to implement new and maintain existing CDM capabilities as mandated by the Office of Management and Budget (OMB) is estimated to be over $12 million in FY 2021 across all appropriations. In accordance with OMB Memorandum M-20-04 "Fiscal Year 2019-2020 Guidance on Federal Information Security and Privacy Management Requirements",[9] EPA also is developing a plan for the Agency's Security Operations Center to improve incident detection and response capabilities, which will be implemented by the end of FY 2020.

With available resources, EPA will work to close non-CDM capability gaps essential to adequately protect agency information assets. Such efforts include analyzing malicious email attachments, detecting and mitigating effects of insider threats and advanced persistent threats, and conducting program responsibilities, such as governance, oversight, and risk management. Additionally, the Agency practices Coordinated Vulnerability Disclosure, a standard process to decrease the harm or time an adversary can use to deny or disrupt services to its networks by working with internal stakeholders, private industry, and federal organizations to communicate vulnerabilities discovered or encountered.

Cybersecurity Risk Management Assessment metrics developed by the National Institute of Standards and Technology and industry best practices help prioritize action to adequately protect agency information assets and provide visibility on vulnerabilities. While EPA's cybersecurity posture is expected to remain at risk in FY 2021, the Agency will continue to conduct risk assessments and alternative analyses to determine which protections EPA must maintain or implement. The Agency is evaluating alternatives for Security Operations as a Service and cloud security options such as Cloud Access Security Brokers Services for possible implementation.

In FY 2021, the Information Security Program will continue to collect Federal Information Security Modernization Act (FISMA) metrics and evaluate related processes, tools, and personnel to continue to identify areas of weakness and opportunities for improvement. The Program will collect phishing test results and evaluate the effectiveness of awareness efforts. With these data, the Agency will identify strategies and prioritize areas to mitigate risks. The Agency will expand strategies for identifying and leveraging common controls while managing system boundaries to reduce compliance costs.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$4,389.0) This program change supports mandatory cybersecurity requirements,[10] including CDM funding that will be used to close existing gaps by improving audit capabilities, ensuring accountability, and adding protections directly associated with the information.

[9] For more information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2019/11/M-20-04.pdf.
[10] Including those found in Federal Information Security Modernization Act of 2014 and Federal Information Security Cybersecurity Act of 2015.

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); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$78,748.7	$80,223.0	$79,064.0	-$1,159.0
Science & Technology	$3,092.6	$3,072.0	$2,890.0	-$182.0
Hazardous Substance Superfund	***$13,755.5***	***$13,792.0***	***$13,874.0***	***$82.0***
Total Budget Authority	$95,596.8	$97,087.0	$95,828.0	-$1,259.0
Total Workyears	391.4	459.4	469.9	10.5

Total workyears in FY 2021 include 172.0 FTE to support IT/Data Management working capital fund (WCF) services.

Program Project Description:

The work performed under the Information Technology/Data Management (IT/DM) Program is partially funded by the Superfund program. The 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 get the information they need on-demand, to understand what it means, and to share environmental data. 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. EPA is committed to enhancing the power of information by delivering on-demand data to relevant parties. An example of this includes continued progress on enterprise data architecture and establishing the role of a Chief Data Officer as required by the Foundations for Evidence-Based Policymaking Act. The Agency's increased investment in TBM will enable EPA to make sound, data-driven IT investment decisions by

incorporating critical IT expenditure data into EPA Chief Information Officer (CIO) portfolio reviews.

In FY 2021, EPA will strengthen further its IT acquisition review process as part of the implementation of federal Common Baseline Controls for FITARA. FITARA controls include an established communication and engagement strategy for the CIO with the Agency's programs and regional offices to ensure their IT plans are well designed, directly drive EPA long-term performance goals, and follow best practices. These controls also enable the CIO to engage closely with key IT stakeholders across EPA and to foster plans to refresh IT skills within the Agency.

The Agency will continue to focus on improving customer experiences to allow EPA, its partners, and the public to acquire, generate, manage, use, and share information as a critical resource. In line with the President's Management Agenda for IT modernization and for data, accountability, and transparency,[11] EPA will improve how it supports and manages the lifecycle of information and information products.

In FY 2021, the following IT/DM activities will continue:

- **Data Management and Collection**: Data management and collection efforts include support for a variety of essential enterprise information management programs. The National Records Management Program will continue providing policies/procedures, coordination, and support to help fulfill EPA's statutory obligations to maintain records. The Program will invest resources to support digitization efforts for the Agency by providing records storage facilities and scanning services for converting paper records into EPA's electronic record keeping systems. In addition, the Program will replace EPA's enterprise records management solution. The Discovery Services Program will continue supporting the search/collection of agency information needed to help respond to requests for information from external stakeholders. EPA will continue to coordinate and oversee the Agency's Information Collection Request (ICR) development and approval process, helping to ensure data collections are submitted timely and approved by the Office of Management and Budget (OMB) as required by the Paperwork Reduction Act. The Section 508 Program will develop training for different stakeholder communities. This program will assess documentation for all public-facing EPA systems/applications via an independent third party and acquire a compliance tool to improve reporting to OMB.

- **Mission Software and Digital Services Capabilities:** The FY 2021 President's Budget includes funding to continue to enhance the Agency's software development and architecture capability, including application development and deployment approaches and technical platforms. This program continues EPA's adoption of transformative technologies and practices, including cloud computing, agile development methodologies, and shared software development services.

- **Geospatial:** The Agency will continue to support the essential capabilities of GeoPlatform, a shared technology enterprise for geospatial information and analysis. By implementing

[11] For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2018/03/Presidents-Management-Agenda.pdf.

geospatial data, applications, and services, the Agency can integrate and interpret multiple data sets and information sources to support environmental decisions. GeoPlatform will continue to publish internal and public mapping tools, which will better inform the public about EPA's programs to protect the environment and public health. As of December 2019, EPA has over 5,200 GeoPlatform mapping applications created or modified for public and internal use, and since calendar year 2014 the number of users has increased tenfold to over 9,000 users.

- **Information Access and Analysis**: EPA will focus on providing core support to agency infrastructure and tools that will drive better environmental decision-making with data from across the Agency. EPA will partner with other agencies, states, tribes, and academic institutions to propose innovative ways to use, analyze, and visualize data. EPA will continue to support Envirofacts and data visualization applications, which receive over 50 million annual application interface requests.

- **Information Technology and Infrastructure**: EPA will adjust the schedule for replacement or upgrades to align with resources and will continue to maintain and provide: desktop computing equipment, network connectivity, e-mail and collaboration tools, hosting services, remote access, telephone services, web and network services, and other IT-related equipment. In FY 2021, the Agency will continue efforts to consolidate EPA's data centers and computer rooms and to optimize operations within EPA's remaining data centers. In addition, the Agency will continue to modernize IT/IM infrastructure, applications, and services to empower a mobile workforce using innovative and agile solutions.

Performance Measure Targets:

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

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$830.0) This change is an increase due to recalculation of base payroll costs.

- (-$748.0 / -2.5 FTE) This net program change modifies the timeline for development of new technologies to address agency needs such as new assistive technology tools, ability to re-platform legacy applications, and replace end of service IT equipment that provides basic workforce support across the Agency.

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); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Rehabilitation Act of 1973 § 508.

Legal / Science / Regulatory / Economic Review

Alternative Dispute Resolution
Program Area: Legal / Science / Regulatory / Economic Review
Goal: More Effective Partnerships
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$667.4	$870.0	$0.0	-$870.0
Hazardous Substance Superfund	***$573.3***	***$710.0***	***$0.0***	***-$710.0***
Total Budget Authority	$1,240.7	$1,580.0	$0.0	-$1,580.0
Total Workyears	4.3	5.9	0.0	-5.9

Program Project Description:

EPA's General Counsel and Regional Counsel Offices provide environmental Conflict Prevention and Resolution Center (CPRC) services and workplace conflict prevention. EPA utilizes CPRC as a method for preventing or resolving conflicts prior to engaging in formal litigation. CPRC includes the provision of legal counsel, facilitation, mediation, and consensus building advice and support. This program oversees a strategically-sourced contract for these services that provides mediation, facilitation, public involvement, training, and organizational development support to all headquarters and regional programs.

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021.

Performance Measures Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$710.0 / -1.4 FTE) This funding change proposes to eliminate the CPRC program. Programs across the Agency may pursue ADR support services and training individually.

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
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Create Consistency and Certainty

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$51,526.8	$47,978.0	$50,263.0	$2,285.0
Hazardous Substance Superfund	***$515.0***	***$543.0***	***$608.0***	***$65.0***
Total Budget Authority	$52,041.8	$48,521.0	$50,871.0	$2,350.0
Total Workyears	258.2	257.4	242.8	-14.6

Total workyears in FY 2021 include 5.5 FTE funded by TSCA fees and 1.0 FTE to support Legal Advice working capital fund (WCF) services.

Program Project Description:

This 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 with Potentially Responsible Parties and other entities and landowners. For example, this 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.

This 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. This program is essential to providing the high-quality legal work to ensure that EPA's decisions are defensible and upheld by the courts against judicial challenges.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Create Consistency and Certainty in the *FY 2018-2022 EPA Strategic Plan*. In FY 2021, the Program will prioritize its legal support capabilities to focus support on high profile and critical CERCLA cases for the Superfund program. The Program will work within available resources to support CERCLA activities, which includes analyzing defensibility of Agency actions, drafting significant portions of Agency actions, and participating in litigation in defense of Agency actions. Legal review is critical to the Superfund program at many points throughout the cleanup process. For example, in support of Goal 1 of the *FY 2018–FY 2022 EPA Strategic Plan* (A Cleaner, Healthier Environment) this program provides legal advice and counseling for final rules adding Superfund sites to the National Priorities List.

The following examples illustrate this program's important role in implementing the Agency's core priorities and mission:

- Participating in and providing legal counsel on the Administrator's Superfund Initiative Task Force including the development of the Task Force Report.

- Providing critical legal support and advice to the Superfund Remedial, Removal, and Enforcement programs on complex, high visibility, expensive Superfund cleanups, such as Gold King Mine.

Performance Measure Targets:

Work under this program supports performance results in the Legal Advice: Environmental Program under the EPM appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$21.0) This change is an increase due to the recalculation of base payroll costs.

- (+$44.0) This program change is an increase to focus on legal support and advice for the Superfund Remedial, Removal, and Enforcement 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); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Operations and Administration

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$33,799.8	$30,945.0	$29,621.0	-$1,324.0
Leaking Underground Storage Tanks	$70.2	$163.0	$138.0	-$25.0
Hazardous Substance Superfund	***$18,593.2***	***$20,533.0***	***$22,982.0***	***$2,449.0***
Total Budget Authority	$52,463.2	$51,641.0	$52,741.0	$1,100.0
Total Workyears	261.2	285.7	259.5	-26.2

Program Project Description:

Superfund resources in the Acquisition Management Program support the Agency's contract activities for Superfund Emergency Response and Removal, Remedial, Emergency Preparedness, and Federal Facilities Response programs. These resources enable the Agency to assess and cleanup Superfund sites, as well as prepare and respond to natural disasters and terrorist incidents.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, EPA will continue to process contract actions in accordance with Federal Acquisition Regulation (FAR) and guidance from the Office of Federal Procurement Policy (OFPP).

Timely procurement processing is crucial to efficient operations. In FY 2019, EPA met its target of 85 percent for procurement action lead times (PALT). The Agency is continuing work toward its long-term performance goal to reduce procurement processing times by achieving 100 percent for PALT by FY 2022. EPA tracks and reviews PALT achievement data on a monthly basis and works with program offices to determine the causes of delays and to improve processing times. As a result of the monthly PALT reviews, EPA has developed additional trainings and resources for the Agency's acquisition community to improve the quality of procurement requests, which is an indicator for the achievement of PALT.

EPA is fully 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:

- The OMB Category Management Cross-Agency Priority (CAP) goal focuses on total acquisition spend transitioned from contract vehicles that are unaligned with category management principles to the Spend Under Management (SUM) program. In FY 2019, to

further EPA's ability to meet its FY 2020 Category Management CAP goal, the EPA revised its Acquisition Guidance section 8.0.100, *Requirements for Mandatory Use of Common Contract Solutions* to include the policy mandating the use of enterprise-wide contract vehicles, in addition to BIC contract solutions and other OMB-designated contract solutions. Based on this policy change, EPA anticipates greater than 50 percent of total addressable spend will have been transitioned into the SUM program by the end of FY 2021, relative to the end of FY 2018 result of 26 percent.

- In FY 2021, EPA will continue to implement BIC solutions to identify pre-vetted, government-wide contracts as part of the Agency's effort to utilize more mature, market-proven acquisition vehicles.[12] Through 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.

- In FY 2021, 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 FY 2019, EPA realized a $4.7 million cost avoidance by using data analysis tools to monitor specific, measurable data related to print services, cellular services, shipping, Microsoft software, voice services, office supplies, lab supplies, PCs, and furniture. Since the beginning of the Strategic Sourcing Program in FY 2013 through the end of FY 2019, EPA has achieved cost avoidance of $19.4 million. In FY 2021, EPA anticipates approximately $4.3 million in additional savings.

In FY 2021, EPA also will continue supporting the Superfund Remedial Acquisition Framework (RAF), which modifies EPA's existing approach for acquiring services to support the Superfund Remedial Program. The RAF consists of three suites of multiple award, indefinite quantity contracts as the primary means for acquiring remedial services: Design and Engineering Services, Remediation Environmental Services, and Environmental Services and Operations. In addition to providing a variety of acquisition tools for Superfund remedial services, RAF aligns with government-wide directives, maximizes competition to realize cost efficiency, strengthens the Agency's contract management processes, and helps to improve efficiency across the Superfund Remedial Program.

In FY 2021, EPA requests an increase to evaluate options for replacing the EPA Acquisition System (EAS) with an approved government-wide Federal Shared Service Provider (FSSP) for a contract writing system. This investment will support the Agency's long-term performance goal in the *FY 2018 – 2022 EPA Strategic Plan* to increase the adoption of shared services. It also is in

[12] For additional information, please refer to: https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2017/M-17-29.pdf *Best-in-Class Mandatory Solution -Package Delivery Services.*

line with OMB-19-16 "Centralized Mission Support Capabilities for the Federal Government"[13] and the President's Management Agenda CAP Goal 5: Sharing Quality Services.[14] The Agency is focusing on a 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.

In FY 2021, EPA will continue to focus on implementing the Financial Information Technology Acquisition Reform Act (FITARA) 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 Acquisition Management Program under the EPM appropriation and the Central Planning, Budgeting and Finance Program under the EPM appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$4,625.0) This change is an increase due to recalculation of base payroll costs.
- (+$100.0) This program change is an increase to support planning for the migration to a Federal Shared Service Provider contract writing system.
- (-$2,276.0 / -15.0 FTE) This program change streamlines contractor support for: helpdesk services for EPA's Acquisition System; the closeout of contracts; and the Defense Contract Management Agency for Audit Services and the Virtual Acquisition Office (a source for up-to-date government acquisition news, research, and analysis). It also proposes to eliminate funding for Contracts Management Assessment Program Reviews, which enables EPA to self-identify and remedy internal weaknesses, and reduces the Agency's training for its acquisition community.

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).

[13] For more information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2019/04/M-19-16.pdf.
[14] For more information, please visit: https://www.whitehouse.gov/wp-content/uploads/2018/03/Presidents-Management-Agenda.pdf.

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$72,920.6	$71,423.0	$76,603.0	$5,180.0
Leaking Underground Storage Tanks	$258.3	$321.0	$450.0	$129.0
Hazardous Substance Superfund	***$23,772.7***	***$21,971.0***	***$22,462.0***	***$491.0***
Total Budget Authority	$96,951.6	$93,715.0	$99,515.0	$5,800.0
Total Workyears	421.4	456.0	435.3	-20.7

Total workyears in FY 2021 include 1.0 FTE funded by TSCA fees and 1.0 FTE funded by e-Manifest fees.
Total workyears in FY 2021 include 39.0 FTE to support Central Planning, Budgeting, and Finance working capital fund (WCF) services.

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 Digital Accountability and Transparency (DATA) Act of 2014 and the Federal Information Technology Acquisition Reform Act (FITARA) of 2015.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. 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, and financial management activities. EPA will sustain basic operations and maintenance of core agency financial management systems: Compass, PeoplePlus (Time and Attendance), Budget Formulation System, and related financial reporting systems. In line with the President's Management Agenda, the Agency is reviewing its financial systems for modernization opportunities to support greater efficiencies and effectiveness and targeting legacy systems for replacement.

EPA will continue to modernize and streamline business processes and operations to promote transparency and efficiency. The Program will apply Lean principles and leverage input from customer-focused councils, advisory groups, and technical workgroups to continue improving as a high-performance organization. EPA will standardize and streamline internal business processes and use additional federal and/or internal shared services when supported by business case analysis. Since 2014, Department of Interior's (DOI) Interior Business Center (IBC) serves as EPA's payroll and HR shared service provider. The resources requested directly support the long-term performance goal in the *FY 2018 – 2022 EPA Strategic Plan*: By September 30, 2022, increase enterprise adoption of shared services by four.

In FY 2021, the Program will continue to focus on core responsibilities in the areas of strategic planning and budget preparation, financial reporting, transaction processing, and Superfund Cost Recovery. The Program will continue to implement FITARA requirements in accordance with EPA's Implementation Plan.[15] The Chief Information Officer will continue to be engaged throughout the budget planning process to ensure that IT needs are properly planned and resourced in accordance with FITARA.

During FY 2021, EPA will focus on implementation of G-Invoicing, Treasury's Interagency Agreement system. The goal is to align EPA's business processes to deliver the new, more streamlined approach for the end-to-end delivery of financial transactions for IAs. Over the next several years, other federal shared services are planned that will impact financial transactions. Among other benefits, EPA seeks to adopt accepted and standardized business processes that will deliver greater streamlining and efficiency and achieve improved financial and programmatic oversight. Equally important is the ability to meet increased transparency needs, such as those prescribed in the DATA Act, as well as increased compliance and reporting standards.

EPA will continue to follow OMB Circular A-123 guidance, conduct internal control program reviews, and use the results and recommendations from the Office of Inspector General (OIG) 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, since FY 2018, through extensive employee outreach and improved communication with human resources, EPA reduced the number of payroll payments made outside of the normal payroll process by 92 percent. EPA also uses its major systems' help desk ticket data to evaluate ticket durations, urgent ticket responses, ticket escalations, and customer experience to determine potential improvements and best practices. In addition, EPA is dedicated to reducing fraud, waste, and abuse, and strengthening internal controls over improper payments. Since the implementation of the Improper Payments Information Act of 2002, EPA has continually reviewed, sampled, and monitored its payments to protect against erroneous payments and complied with reporting requirements.

[15] For more information please see: http://www.epa.gov/open/fitara-implementation-plan-and-chief-information-officer-assignment-plan.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$3,126.0) This change is an increase due to recalculation of base payroll costs.

- (-$2,826.0 / -12.1 FTE) This net program change is a decrease as the Agency streamlines in the areas of strategic planning, budget preparation, financial reporting, and transaction processing including the closure of the Las Vegas Finance Center and related decommissioning of the LAN and IGMS interface.

- (-$1,034.0) This decrease represents savings from the decommissioning of the Superfund Cost Recovery Package Imaging and On-line System (SCORPIOS).

- (+$1,225.0) This program increase supports the e-Recovery system to provide cost recovery support.

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
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$321,500.4	$287,595.0	$317,345.0	$29,750.0
Science & Technology	$67,856.9	$65,372.0	$67,908.0	$2,536.0
Building and Facilities	$23,017.8	$26,922.0	$33,377.0	$6,455.0
Leaking Underground Storage Tanks	$847.2	$868.0	$796.0	-$72.0
Inland Oil Spill Programs	$577.3	$665.0	$682.0	$17.0
Hazardous Substance Superfund	***$82,243.2***	***$76,473.0***	***$76,831.0***	***$358.0***
Total Budget Authority	$496,042.8	$457,895.0	$496,939.0	$39,044.0
Total Workyears	329.9	315.4	307.6	-7.8

Total workyears in FY 2021 include 2.1 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, printing, mail, and transportation services. Funding for such services is allocated among the major appropriations for the Agency.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, EPA will continue to invest in the reconfiguration of EPA's workspaces, enabling the Agency to release office space and reduce long-term rent costs, consistent with HR 4465,[16] the *Federal Assets Sale and Transfer Act of 2016*. EPA is implementing a long-term space consolidation plan that will reduce the number of occupied facilities, consolidate space within remaining facilities, and reduce square footage wherever practical. EPA also will continue to work to enhance its Federal infrastructure and operations in a manner that increases efficiency.[17]

[16] For additional information, please refer to: https://www.congress.gov/bill/114th-congress/house-bill/4465, *Federal Assets Sale and Transfer Act of 2016*.
[17] For additional information, please refer to: https://www.whitehouse.gov/presidential-actions/executive-order-regarding-efficient-federal-operations/, Executive Order 13834 "Efficient Federal Operations". For information on EPA's FY 2018 performance for efficient Federal operations/management, please visit: https://www.sustainability.gov/images/scorecards/epa-scorecard-fy2018.png.

EPA is working toward the long-term performance goal in the *FY 2018 – 2022 EPA Strategic Plan* to reduce unused office and warehouse space by 850,641 square feet nationwide by September 30, 2022. This has the potential to provide a cumulative annual rent avoidance of nearly $28 million across all appropriations. This will help offset EPA's escalating rent and security costs. In FY 2019, EPA released 128,150 square feet of unused office and warehouse space. Planned consolidations in FY 2021 will allow EPA to release an expected 319,693 square feet of space. For FY 2021, the Agency is requesting $46.84 million for rent, $2.39 million for utilities, and $8.64 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.

In FY 2021, the Agency will take aggressive action to reconfigure EPA's workplaces with the goal of reducing long-term rent costs. Space consolidation and reconfiguration enables EPA to reduce its footprint to create a more efficient, collaborative, and technologically sophisticated workplace.

EPA will continue to manage lease agreements with GSA and private landlords, and maintain EPA facilities, fleet, equipment, and fund costs associated with utilities and building security needs. 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.

In addition, the Agency will continue to utilize GSA's Managed Service Office, *USAccess*, for PIV card enrollment and issuance. *USAccess* is a shared services solution which is in line with OMB's Federal IT Shared Services Strategy and the President's Management Agenda.[18]

Performance Measure Targets:

Work under this program supports performance results in the Facilities Infrastructure and Operations Program under the EPM appropriation and the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$283.0) This change is an increase due to recalculation of base payroll costs.
- (+$1,454.0) This change to fixed and other costs is an increase due to the recalculation of rent, utilities, and security.
- (-$1,379.0 / -2.3 FTE) This program change reduces environmental management system activities, comprehensive facility energy audits, and re-commissioning.

[18] For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2018/03/Presidents-Management-Agenda.pdf.

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); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Financial Assistance Grants / IAG Management
Program Area: Operations and Administration
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$23,794.8	$23,802.0	$21,452.0	-$2,350.0
Hazardous Substance Superfund	***$2,517.7***	***$2,580.0***	***$2,903.0***	***$323.0***
Total Budget Authority	$26,312.5	$26,382.0	$24,355.0	-$2,027.0
Total Workyears	129.9	139.5	115.7	-23.8

Program Project Description:

Superfund resources in the Financial Assistance Grants and Interagency Agreement (IA) Management Program support the management of grants and IAs, and suspension and debarment activities. Resources in this program ensure that EPA's management of grants and IAs meet the highest fiduciary standards, that the grant and IA funding produces measurable results for environmental programs, and that the suspension and debarment program effectively protects the government's business interest. 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. Accordingly, EPA will continue to implement activities to achieve efficiencies while enhancing quality and accountability. In FY 2021, EPA will continue investments in modernizing grant and IA information technology/information management (IT/IM) systems in support of the President's Management Agenda.[19]

Work in this program supports the long-term performance goal in the *FY 2018 – 2022 EPA Strategic Plan*: By September 30, 2022, increase enterprise adoption of shared services by four. The Agency will complete activities to align its IA business processes to ensure compatibility with the government-wide mandate to adopt G-Invoicing by June 2021.

In FY 2021, additional resources are requested for the Agency to complete the deployment of EPA's Next Generation Grants System (NGGS) and retiring outdated legacy grants management system. The transition to NGGS has a relatively low deployment time and will require fewer training resources as the system is based on legacy grant system infrastructure already familiar to

[19] For more information, please visit: https://www.whitehouse.gov/wp-content/uploads/2018/03/Presidents-Management-Agenda.pdf.

staff. NGGS relies on a flexible platform that will enable it to adapt to changing technology and business processes and will allow it to easily integrate with other agency systems. Prior to moving forward with the development of NGGS, EPA researched available federal shared service providers for grants systems and was unable to identify an existing solution that would enable the Agency to fulfill its fiduciary responsibilities, and ensure proper accountability, oversight, controls, reporting capability, and financial stewardship of EPA grants.

EPA will continue to focus on reducing the administrative burden on EPA and grants recipients, and on improving grants management procedures by: 1) streamlining EPA's grants management policies through a new comprehensive framework to guide policy development, implementation, compliance, and review; 2) using EPA's Lean Management System to refine grants management processes; and 3) moving to a risk-based method of pre- and post-award monitoring for grants to more effectively ensure compliance and to also reduce burden.

The Agency will continue to make use of discretionary debarments and suspensions to protect the government's business interests. In FY 2021, EPA will focus suspension and debarment activity onto the most egregious violations. 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 non-procurement awards (for example: grants, cooperative agreements, loans, and loan guarantees). A number of recent federal statutes, GAO reports, and OMB directives require that federal agencies administer effective suspension and debarment programs to protect the public's interest and the integrity of federal programs.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$650.0) This change is an increase due to recalculation of base payroll costs.

- (-$427.0 / -2.4 FTE) This program change reflects expected efficiencies in the processing of grant and IA awards, lower requested grant funding levels throughout the Agency, and a review of unliquidated obligations. EPA will target funds to core grant and IA activities.

- (+$100.0) This program change is an investment to support migration to a new grants administration management system and retiring outdated legacy software.

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; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Human Resources Management
Program Area: Operations and Administration
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$43,339.9	$41,556.0	$44,538.0	$2,982.0
Hazardous Substance Superfund	***$6,163.7***	***$6,548.0***	***$5,704.0***	***-$844.0***
Total Budget Authority	$49,503.6	$48,104.0	$50,242.0	$2,138.0
Total Workyears	201.4	228.2	223.0	-5.2

Program Project Description:

Superfund resources for the Human Resources (HR) Management Program support human capital (HC) activities throughout EPA. To help achieve its mission and maximize employee productivity and job satisfaction in the Superfund Program, EPA continually works to improve business processes for critical HC functions including recruitment, hiring, employee development, performance management, leadership development and workforce planning. This includes personnel and payroll processing through the Human Resources Line of Business. Superfund resources also support Chief Human Capital Officer Council activities under applicable statutes and guidance, including the Agency's Human Capital Operating Plan.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. Effective workforce management is critical to EPA's ability to accomplish its mission. EPA's efforts in HC functions are focused on sustaining the workforce, retaining critical expertise, and capturing institutional knowledge. The Agency is developing and deploying management tools to assist EPA in ensuring the right staff with the appropriate skills are placed in the most suitable positions. These tools also will be valuable as an increasing percentage of the workforce becomes retirement eligible. Currently, 25 percent of EPA's workforce is retirement eligible, increasing to an estimated to 50 percent over the next five years. EPA will continue to support efforts to maintain the high-quality of core operations, improve productivity, and achieve cost savings in mission support functions including HC management.

In FY 2021, the Agency will continue to build upon its performance, learning, and succession management activities. EPA will maintain and operate *FedTalent*, a talent management system provided through the Department of Interior (DOI)'s Interior Business Center (IBC). *FedTalent* serves as a valuable tool that assists with developing, delivering, and tracking high-impact training. EPA will continue to migrate and consolidate training data from more than 15 disparate training repositories to ensure *FedTalent* is a one-stop-shop for all training needs. Additionally, the Agency

is planning to procure and deploy a performance management system to move from paper to an automatic process for the start of FY 2021.

In FY 2021, EPA will continue to maintain and operate two other recent workforce planning tools – the Mission Critical Occupations dashboard (to be fully launched in FY 2020) and the Workforce Demographics and Diversity dashboards (both fully deployed and in place). These dashboards provide data visualizations and easy-to-understand information about the current workforce and are essential for succession planning and management because they afford managers a strategic view of retirement eligibility, diversity information, occupational series, and grade levels, as well as the ability to drill down and access data at lower organizational levels. The dashboards assist EPA with succession planning by helping identify workforce gaps due to anticipated retirements and attrition trends.

The Agency will continue the development and piloting of its Talent Enterprise Diagnostics (TED) tool in FY 2020, which advances human capital priorities by enhancing EPA's ability to make strategic workforce decisions. In FY 2021, TED data will serve a crucial role in EPA's Workforce Planning and Succession Management process to identify potential competency gaps across the Agency and to increase management's understanding of where needed skill sets reside within EPA.

EPA is working to develop and maintain a high-caliber and modern information technology and security workforce though direct hiring authority (DHA) granted by 5 CFR § 337[20] for information technology (IT) positions. This authority allows EPA to recruit highly skilled candidates in very technical areas of work without regard to the provisions of Title 5. The Agency hired 23 IT specialists leveraging this authority in FY 2019. EPA will continue to leverage the use of the DHA across IT specialist occupation categories in FY 2020 and FY 2021.

In FY 2021, EPA's Human Resources Shared Service Centers (HRSSC) in Cincinnati, Ohio and Research Triangle Park, North Carolina will continue to manage recruitment, employee relations and advisory services, develop, implement, and enhance training and employee orientation programs, and provide management guidance on workforce planning and personnel policies. Additionally, the HRSSCs will continue to coordinate and deliver a comprehensive human resource management program. Other, specific functions encompass employee benefits, retirement counseling, career development, performance management, personnel actions, and quality of life issues.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$182.0) This change is an increase due to the recalculation of base payroll costs.

[20] For more information, please refer to: https://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&sid=1b430a73f84957c9f1af2dee2ff9d0d5&rgn=div5&view=text&node=5:1.0.1.2.48&idno=5#5:1.0.1.2.48.2.16.1.

- (-$662.0) This net program change reduces funding for: operational support for HR programs being utilized agencywide including the Agency's recruitment and diversity and inclusion activities, EPA's Human Resources Council and National Partnership Council, the Leave Bank, and the Workplace Solutions; enhancements and maintenance of EPA's HR IT Systems including HR Line of Business, data management and analysis, troubleshooting, and change requests; support for Federal Advisory Committees not mandated by statute; and centrally-provided, non-mandatory training.

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); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Research: Sustainable Communities

Research: Sustainable and Healthy Communities
Program Area: Research: Sustainable Communities
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Prioritize Robust Science

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Science & Technology	$135,083.1	$132,477.0	$58,597.0	-$73,880.0
Leaking Underground Storage Tanks	$130.5	$320.0	$304.0	-$16.0
Inland Oil Spill Programs	$599.6	$664.0	$522.0	-$142.0
Hazardous Substance Superfund	***$11,004.7***	***$16,463.0***	***$11,448.0***	***-$5,015.0***
Total Budget Authority	$146,817.9	$149,924.0	$70,871.0	-$79,053.0
Total Workyears	411.9	421.8	294.6	-127.2

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."[21]

The SHC Research Program is one of six integrated and transdisciplinary research programs in the Research and Development Program. Each of the six integrated and transdisciplinary research 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 implemented with their active collaboration and involvement. As part of the FY 2021 Budget, the new SHC FY 2019-2022 StRAP builds upon prior SHC StRAPs and continues a practice of conducting innovative scientific research aimed at solving the problems encountered by agency partners and stakeholders.

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.

[21] 42 U.S.C. § 9660(b).

Recent Accomplishments of the SHC Research Program include:

- **Superfund Technical Support Centers (TSC) for Engineering[22] and Groundwater:[23]** EPA's Engineering Technical Support Center (ETSC) services both National Priorities List Superfund and Resource Conservation and Recovery Act (RCRA) sites and prepares Engineering Issue Papers and webinars/presentations on critical topics of broad application to site remediation across the United States. The Ground Water Technical Support Center (GWTSC) consists of a group of scientists and engineers with broad expertise who provide help with subsurface contamination, contaminant fluxes from groundwater to other media, and ecosystem restoration issues. The ETSC and GWTSC respond to approximately 275 requests for assistance per year, 75-80 percent of which are from National Priority List sites.[24] Requests come from Superfund and RCRA corrective action staff from all 10 EPA Regions. Most requests are for document review or for technical advice. Some requests require field work, sampling, or laboratory analysis. The TSC responded to requests for assistance at some of the Agency's highest priority Superfund sites,[25] including the Bonita Peak Mining district in CO, the Quendell Terminal site in WA, the Tar Creek site in OK, the L.A. Clarke & Sons site in PA, and the Olin Chemical Superfund site in MA.

- **Peer-reviewed journal articles in FY 2019 on geophysical methods to characterize and monitor groundwater-surface water interactions:[26]** EPA addresses contaminated groundwater at approximately 85 percent of Superfund sites[27] and at many RCRA[28] sites and Brownfields[29] sites. Such contamination can interact with surface water and pollute drinking water or produce adverse impacts on aquatic species and mobilize contaminants through the food chain, impacting human health. The two articles published in 2019 support the scientific foundation to map, characterize, and understand groundwater inputs into surface water bodies. The geophysical methods referenced in the 2019 articles facilitate Agency decision-making at Superfund and RCRA sites and aid in remediation and plume capture design. This work supports the Land and Emergency Management Program priorities for understanding the linkages between contaminant concentrations in sediment and fish tissue concentrations.

- **Peer-reviewed journal publication on Thioarsenite Detection and Implications for Arsenic Transport in Groundwater (September 2019):[30]** EPA research addresses problems encountered at Superfund sites across the country, where groundwater pollution can result in polluted aquifers, wells, and surface water leading to polluted drinking water. Arsenic toxicity and mobility in groundwater depend on the chemical compounds that

[22] For more information, please see: https://www.epa.gov/land-research/engineering-technical-support-center-etsc.
[23] For more information, please see: https://www.epa.gov/water-research/ground-water-technical-support-center-gwtsc.
[24] For more information, please see: Engineering Technical Support Center Annual Reports; Groundwater Technical Support Center Annual Reports.
[25] For more information, please see: https://www.epa.gov/superfund/administrators-emphasis-list.
[26] For more information, please see: https://doi.org/10.5194/hess-22-6383-2018; https://doi.org/10.1111/gwat.12846; https://doi.org/10.1002/2015WR018219.
[27] For more information, please see: https://www.epa.gov/superfund/how-superfund-addresses-groundwater-contamination.
[28] For more information, please see, for example: https://www.epa.gov/hwpermitting/ground-water-monitoring-requirements-hazardous-waste-treatment-storage-and-disposal.
[29] For more information, please see: https://www.epa.gov/sites/production/files/2017-11/documents/brownfieldsroadmapepa542-r-12-001.pdf.
[30] For more information, please see: https://pubs.acs.org/doi/10.1021/acs.est.9b04478.

arsenic forms in groundwater. EPA research describes methods to characterize those arsenic compounds, especially those containing sulfur. The published, analytical methods allow better prediction of transport and fate of arsenic in groundwater and the development of remediation approaches for treating impacted aquifers.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3 Objective 3.3, Prioritize Robust Science in the *FY 2018 – 2022 EPA Strategic Plan,* as well as the recommendations of the Superfund Task Force of July 2017.[31] In FY 2021, EPA research under SHC will support the Land and Emergency Management Program, regional offices, states, and tribes, by providing technical assistance and support to help characterize, remediate, and manage contaminated sites and groundwater. The tools developed under the SHC Research Program will help the Land and Emergency Management Program and the regional offices address complex contamination problems at Superfund, RCRA, and Brownfields sites in the United States. EPA research personnel and associated support staff also will analyze existing research data on vapor intrusion, contaminated groundwater and sediments, and innovative technologies for site characterization and remediation. Additionally, scientific journal articles will be published to disseminate findings associated with the data.

Research Planning:

EPA's Board of Scientific Counselors (BOSC) is a federal advisory committee that provides advice and recommendations to EPA's Research and Development Program on technical and management issues of its research programs. The SHC Research Program will continue to meet regularly over the next several years with the BOSC SHC subcommittee to seek input on topics related to research program design, science quality, innovation, relevance, and impact.

The Agency assesses its research performance through the distribution of research evaluation surveys to key users of its research products. This provides evidence for how research products are being used, by whom, and the degree of satisfaction product users have with research product quality, usability, and timeliness of delivery. Through the evaluation process, the Agency identifies its strengths and finds targeted areas for improvement to its research programs.

EPA's state engagement program[32] 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. Key partners at the state level include: the Environmental Council of the States, with its Environmental Research Institute of the States and Interstate Technology and Regulatory Council; the Association of State and Territorial Health Officials; as well as state media associations, such as the Association of State and Territorial Solid Waste Management Officials.

[31] For more information, please see: https://www.epa.gov/superfund/superfund-task-force-recommendations.
[32] For more information on EPA's state engagement efforts, 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 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$80.0) This change is an increase due to the recalculation of base payroll costs.

- (-$5,095.0 / +8.5 FTE) This net program change streamlines funding for research associated with designating chemicals as hazardous substances. It also refocuses the Agency's scientific and engineering expertise provided to address environmental problems via Technical Support Centers.

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).

Research: Chemical Safety and Sustainability

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Science & Technology	$37,003.7	$37,351.0	$24,694.0	-$12,657.0
Hazardous Substance Superfund	***$2,864.9***	***$12,824.0***	***$6,159.0***	***-$6,665.0***
Total Budget Authority	$39,868.6	$50,175.0	$30,853.0	-$19,322.0
Total Workyears	144.0	154.9	111.6	-43.3

Program Project Description:

EPA's Health and Environmental Risk Assessment (HERA) Research 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: Clean Air Act; Clean Water Act; Safe Drinking Water Act; Toxic Substances Control Act (TSCA); and 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 rapid risk 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 is one of six integrated and transdisciplinary research programs within the Research and Development Program. The six research programs are each guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement. As part of the FY 2021 Budget, the new HERA FY 2019-2022 StRAP builds upon prior Human Health Risk Assessment (HHRA) StRAPs and continues a practice of conducting innovative scientific research aimed at solving the problems encountered by agency partners and stakeholders.

For the FY 2021 Budget, EPA renamed the HHRA Research Program to the HERA Research Program, to more accurately reflect the breadth of assessments conducted under this research program, including exposure and ecological assessments as well as human health hazard assessments. For example, this research program prepares the Integrated Science Assessments (ISAs) for both the primary and secondary National Ambient Air Quality Standards (NAAQS), the former statutorily related to human health effects and the latter covering human welfare, which includes ecological and other environmental impacts of the air pollutants. The timing of the

proposed name change to HERA coincides with, and is supportive of, the Research and Development Program's reorganization which occurred in September 2019.

HERA 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 to assist in the Agency's chemical risk assessment work. PPRTVs 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.[33] 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:

- **PPRTV Documents:** In FY 2019, the HERA Research Program completed three PPRTV documents based on the needs and priorities of EPA's Superfund Program. These include, 2-Ethylhexanol,[34] 2-Nitropropane,[35] and p-α,α,α-tetrachlorotoluene.[36]

- **Technical Support:** In FY 2019, HERA fielded more than ten requests for scientific support on human and ecological assessment via the Superfund Health Risk Technical Support Center and Ecological Risk Assessment Support Center. These requests included assistance with employing new approach methods and continued stakeholder engagement on complex science to address needs of Superfund sites across the United States.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in the *FY 2018 – 2022 EPA Strategic Plan.* In FY 2021, 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:

[33] For more information, please see: https://www.epa.gov/superfund/superfund-national-priorities-list-npl.
[34] For more information, please see: https://cfpub.epa.gov/ncea/pprtv/recordisplay.cfm?deid=344923.
[35] For more information, please see: https://cfpub.epa.gov/ncea/pprtv/recordisplay.cfm?deid=347734.
[36] For more information, please see: https://cfpub.epa.gov/ncea/pprtv/recordisplay.cfm?deid=347733.

- **PPRTV Assessments:** Provide at least six additional PPRTV assessments of variable scale as prioritized by EPA's Land and Emergency Management Program.

- **Portfolio of Chemical Evaluation Products:** Complement the PPRTVs by providing additional 'fit-for-purpose' assessment products for priority chemicals, such as for up to five perfluorinated compounds and lead 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:** Continue to collaborate with the Chemical Safety for Sustainability (CSS) Research Program to link the architecture of assessment databases and literature management tools, including *Health and Environmental Research Online*, with the RapidTox Dashboard being developed in CSS.

- **Rapid Technical Support:** Continue essential technical assistance across EPA to provide rapid technical support to programs and regions. These activities will provide expedited health hazard and exposure technical support for evaluating chemical-specific exposures at Superfund and contaminated sites, as well as incorporating case-specific information related to urgent situations.

Research Planning:

EPA's Board of Scientific Counselors (BOSC) is a federal advisory committee that provides advice and recommendations to EPA on technical and management issues of its research programs. The HERA Research Program and the BOSC HERA subcommittee will meet regularly over the next several years to seek input on topics related to research program design, science quality, innovation, relevance, and impact.

The Agency assesses its research performance through the distribution of research evaluation surveys to key users of its research products. This provides evidence for how research products are being used, by whom, and the degree of satisfaction product users have with research product quality, usability and timeliness of delivery. Through the evaluation process, the Agency identifies its strengths and finds targeted areas for improvement to its research programs.

EPA's state engagement[37] 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. Key partners at the state level include: the Environmental Council of the States, with its Environmental Research Institute of the States and the Interstate Technology and Regulatory Council; the Association of State and Territorial Health Officials; as well as state media associations, such as the Association of State and Territorial Solid Waste Management Officials.

Performance Measure Targets:

[37] 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 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$546.0) This change is an increase due to the recalculation of base payroll costs.

- (-$9,725.0) This program change streamlines funding for research associated with designating chemicals as hazardous substances. It also streamlines Superfund related research within the area of health and environmental assessment.

- (+$2,514.0 / +14.7 FTE) This rebalances resources from the S&T appropriation to the Superfund appropriation within this program for work related to IRIS assessments.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Superfund Cleanup

Superfund: Emergency Response and Removal
Program Area: Superfund Cleanup
Goal: A Cleaner, Healthier Environment
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Hazardous Substance Superfund	***$215,077.1***	***$189,306.0***	***$170,748.0***	***-$18,558.0***
Total Budget Authority	$215,077.1	$189,306.0	$170,748.0	-$18,558.0
Total Workyears	262.9	244.7	244.7	0.0

Program Project Description:

The Emergency Response and Removal Program (SF 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.[38] Further, this program is responsible for the Agency's only Primary Mission Essential Function.

Over the last 10 years (2010-2019), EPA completed or oversaw more than 3,066 Superfund removal actions across the country. SF Removal sites can be found in remote rural areas as well as large urban settings. Approximately 11 million people live within three miles of 221 SF Removal sites where EPA completed a removal action in FY 2016 – equal to about 3 percent of the total US population.[39] SF Removal clean-ups vary in complexity and contain a wide variety of contaminants including mercury, lead, and asbestos.[40]

The SF 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 in order 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 communities.

[38] For additional information, please refer to: https://www.epa.gov/emergency-response/national-oil-and-hazardous-substances-pollution-contingency-plan-ncp-overview.
[39] U.S. EPA, Office of Land and Emergency Management Estimate 2017. Data collected includes (1) site information as of the end of FY 2016 and (2) census data from the 2011-2015 American Community Survey.
[40] Data from US EPA Superfund Enterprise Management System.

Agency On-Scene Coordinators (OSCs) make up the core of the SF 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018 – 2022 EPA Strategic Plan*. During FY 2019, EPA conducted 233 removal actions exceeding its annual target of 175 removals by 33 percent. In FY 2021, the SF Removal Program will:

- Respond to, and provide technical assistance for, emergency responses, removal assessments, and limited time critical response actions (non-emergency responses).

- 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.

Performance Measure Targets:

(PM 137) Number of Superfund removals completed.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target		275	275	275	175	175	141	141	Removals
Actual		278	226	255	242	233			

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$3,704.0) This change is an increase due to the recalculation of base payroll costs.

- (-$22,262.0) The EPA will prioritize its resources on sites which pose an immediate threat to human health and the environment.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Sections 104, 105, 106; Clean Water Act (CWA); and Oil Pollution Act (OPA).

Superfund: EPA Emergency Preparedness
Program Area: Superfund Cleanup
Goal: A Cleaner, Healthier Environment
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Hazardous Substance Superfund	***$7,679.9***	***$7,636.0***	***$7,700.0***	***$64.0***
Total Budget Authority	$7,679.9	$7,636.0	$7,700.0	$64.0
Total Workyears	33.5	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 in order 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018 – 2022 EPA Strategic Plan.* EPA continuously works to improve its management of emergency response assets to be better prepared to handle large unprecedented incidents in order to 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 NRT[41] and co-chair the 13 RRTs. The NRT and RRTs are the only active environmentally-focused interagency executive committees addressing oil and hazardous

[41] For additional information, please refer to: https://www.nrt.org/.

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 System[42] which provides the approach to manage incidents and works hand in hand with the NRF.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$1,167.0) This change is an increase due to the recalculation of base payroll costs.

- (-$1,103.0) This net program change will result in streamlined exercises and training held with federal, state, and local partners.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), §§ 104, 105, 106; Robert T. Stafford Disaster Relief and Emergency Assistance Act.

[42] For additional information, please refer to: http://www.fema.gov/national-incident-management-system.

Superfund: Federal Facilities
Program Area: Superfund Cleanup
Goal: A Cleaner, Healthier Environment
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Hazardous Substance Superfund	***$22,544.5***	***$21,125.0***	***$21,621.0***	***$496.0***
Total Budget Authority	$22,544.5	$21,125.0	$21,621.0	$496.0
Total Workyears	104.5	109.7	114.7	5.0

Total workyears in FY 2021 include 11.5 reimbursable FTE to support Federal Facilities.

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, pursuant to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 120. Program responsibilities include: 1) inventory and assess potentially contaminated sites; 2) implement protective remedies; 3) facilitate early transfer of property; and 4) ensure ongoing protectiveness of completed cleanups.

The Federal Facility NPL sites 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). To ensure efficiencies and consistent approaches to cleanup, the Program collaborates with the other federal agencies and states. The Superfund Federal Facilities Program will continue to work with our federal partners to target high priority sites, consider best practices, develop innovative solutions to emerging and unique contaminants, implement strategies to reach cleanup completion at sites, and bring contaminated land into beneficial reuse.[43]

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 encourages 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. An FY 2019 study identified 22 federal facility Superfund sites in reuse with a total of 1,400 businesses that generated $9.4 billion in annual sales and provide 115,000 jobs and $7 billion in annual employment income.[44]

[43] For additional information, please refer to: https://www.epa.gov/fedfac.
[44] For additional information, please refer to: https://www.epa.gov/fedfac/redevelopment-economics-federal-facilities.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018 – 2022 EPA Strategic Plan*. One of the Agency's top priorities is accelerating progress on Superfund sites. The Program will focus on Superfund Task Force recommendations including engaging with state, local, and tribal partners; and creating sensible approaches that enhance economic growth. A program goal is to achieve sites ready for anticipated use and promote the reuse and restoration of federal facility sites by prioritizing resources to focus on remedial actions and construction completions to accelerate Site-Wide Ready for Anticipated Use determinations and NPL deletions. In addition, the Program will prioritize and continue to partner with OFAs, states, tribes, and local communities to limit human exposure to potentially harmful levels of PFAS and lead in the environment.

EPA also 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 such as PFAS, and contamination from legacy nuclear weapons development and energy research. While Department of Energy (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 Department of Defense (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.

In FY 2019, the Program designated remedial decisions at 57 federal facility sites to address environmental contamination. The Program also achieved 33 Remedial Action Project Completions and reviewed 53 Five-Year Reviews to confirm protective remedies remain in place. Additionally, the Program is engaged at 88 Federal Facility NPL sites with PFAS detections, ensuring consistent and protective responses.

In FY 2021, the Superfund Federal Facilities Program will prioritize 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.[45] The Docket is updated semi-annually and has over 2,300 facilities listed. To ensure the long-term protectiveness of the cleanup remedies, EPA will continue monitoring, overseeing progress, and improving the quality and consistency of Five-Year Reviews conducted at NPL sites where waste has been left in place and land use is restricted as required under Section 121(c) of CERCLA.

[45] EPA developed a website called FEDFacts, where all sites are mapped and linked to available environmental information, which may be found at: https://www.epa.gov/fedfacts.

Performance Measure Targets:

Work under this program supports performance results in the Superfund Remedial Program under the SF appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$1,669.0) This change is an increase due to the recalculation of base payroll costs.

- (-$1,173.0) This net program change may require modified project schedules and cleanup milestones. The Program will prioritize resources on those facilities that present the highest risk to human health and the environment.

- (+5.0 FTE) This program change increases reimbursable FTE to support acceleration of cleanup work at Department of Energy's Hanford NPL Site.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 120.

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Hazardous Substance Superfund	***$604,659.0***	***$576,673.0***	***$482,329.0***	***-$94,344.0***
Total Budget Authority	$604,659.0	$576,673.0	$482,329.0	-$94,344.0
Total Workyears	894.9	868.8	868.8	0.0

Program Project Description:

The Superfund Remedial Program addresses many of the worst contaminated areas in the United States by investigating contaminated sites and implementing long-term clean-up remedies. The Superfund Remedial Program also oversees response work conducted by potentially responsible parties (PRPs) at National Priorities List (NPL) and Superfund Alternative Approach (SAA) sites. Completing relatively straightforward response actions, such as soil excavation or capping remedies, can take a few months, while implementing remedies at complex, large area-wide groundwater, sediment, or mining sites may take decades.

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 by returning Superfund sites to productive use. As of FY 2019, EPA data shows that approximately 1,000 Superfund sites are in reuse, more than half the number of sites ever placed on the NPL. EPA has data on over 9,100 businesses at 602 of these sites. In FY 2019 alone, these businesses generated $58.3 billion in sales. These businesses employed more than 208,000 people who earned a combined income of over $14 billion. Over the last eight years, these businesses generated at least $321 billion in sales.[46]

While conducting cleanup at NPL and SAA sites, Superfund 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 clean-up lowered the risk of elevated blood lead levels by roughly 8 to 18 percent for children living within two kilometers of a Superfund NPL site where lead is a contaminant of concern.[47] Cleanup work under the Superfund Remedial Program also improves property values. A study conducted by researchers at Duke University and University of Pittsburgh found that residential property values within three

[46] For more information on Redevelopment Economics, please refer to: https://www.epa.gov/superfund-redevelopment-initiative/redevelopment-economics-superfund-sites.
[47] Details can be found at https://www.epa.gov/environmental-economics/research-environmental-economics-ncee-working-paper-series.

miles of Superfund sites increased between 18.7 and 24.4 percent when sites were cleaned up and deleted from the NPL.[48]

In July 2017, EPA's Superfund Task Force developed a report containing 42 recommended actions in five goal areas: 1) Expediting Cleanup and Remediation; 2) Re-Invigorating Responsible Party Cleanup and Reuse; 3) Encouraging Private Investment; 4) Promoting Redevelopment and Community Revitalization; and 5) Engaging Partners and Stakeholders. Since then, EPA has worked to efficiently implement the recommendations and reach outcome-driven results aimed at expediting site cleanup, redevelopment, and community revitalization. As of September 2019, all 42 recommendations have been implemented by the Superfund Program. Key accomplishments related to the Superfund Remedial Program under the Superfund Task Force recommendations include:

- Increased the number of sites with Human Exposure Under Control;
- Improved public access to information on human exposure status;
- Increased number of sites fully or partially deleted from the NPL compared to prior years;
- Implemented Administrator review of remedy decisions greater than or equal to $50 million;
- Focused optimization evaluations on priority sites;
- Developed a Superfund Risk Communication Improvement Plan;
- Furthered use of new remediation technologies by developing technical information and presenting webinars and training; and
- Made information on Superfund sites with reuse potential more widely available.

Additional Superfund Task Force accomplishments, including detailed information on implementation efforts, can be found in the Superfund Task Force Recommendations Final Report.[49]

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination, in the *FY 2018 – 2022 EPA Strategic Plan*. For example, EPA made 48 Superfund sites ready for anticipated use in FY 2019, contributing to a two-year FY 2018-2019 Agency Priority Goal (APG) of 102 sites. EPA continues to focus on making sites ready for anticipated use and will report results for the FY 2020 – 2021 APG: Accelerate the pace of cleanups and return sites to beneficial use in their communities.

In FY 2021, EPA will prioritize resources to execute its non-delegable, federal responsibility to remediate sites and protect human health, welfare, and the environment. The Superfund Remedial Program 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

[48] 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.

[49] The Superfund Task Force (SFTF) Recommendations Final Report can be found at: https://semspub.epa.gov/work/HQ/100002231.pdf.

sites on the final NPL do not have an associated open special account and must rely on annually appropriated funds.

In FY 2021, EPA plans to continue to incorporate activities recommended by the Superfund Task Force to expedite cleanup while continuing to encourage private investment, promote Superfund site redevelopment, and build and strengthen partnerships. EPA also will continue to prioritize ongoing fund-led investigation, remedial design, construction, and long-term response actions to bring human exposure and groundwater migration under control.

In FY 2021, EPA proposes to direct resources in the Superfund Remedial Program to support implementation of the Per- and Polyfluoroalkyl Substances (PFAS) Action Plan. This investment provides additional tools to help states and communities assess PFAS presence. This work supports the FY 2020 – 2021 APG: Reduce PFAS risks to the public.

Performance Measure Targets:

(PM 151) Number of Superfund sites with human exposures brought under control.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target	10	9	9	9	8	12	10	10	Sites
Actual	9	10	12	24	32	17			

(PM 170) Number of remedial action projects completed at Superfund sites.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target	115	105	105	105	95	95	80	80	Projects
Actual	115	104	105	97	87	89			

(PM S10) Number of Superfund sites made ready for anticipated use site-wide.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target	55	45	45	45	51	51	51	51	Sites
Actual	45	45	41	43	51	48			

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$9,126.0) This change is an increase due to the recalculation of base payroll costs.

- (+$1,000.0) This program change is an investment supporting cross-agency work on implementation of the PFAS Action Plan.

- (-$104,470.0) This net program change is a decrease to the Superfund Remedial Program. Funds will be prioritized for NPL sites that present the highest risk to human health and the environment, while modifying timelines for completing remedial investigation/feasibility study, remedial design and new construction projects for other sites, and reducing discretionary activities.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Superfund Special Accounts

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 the use of special accounts, EPA ensures responsible parties pay for cleanup so that annually appropriated resources from the Superfund Trust Fund 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 1,335 Superfund sites listed as final on the National Priorities List, more than half do not have special account funds available for use (as of October 1, 2019). 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.

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.

EPA, through the implementation of recommendations from the Superfund Task Force[50], is working to ensure that contaminated sites across the country are remediated to protect human health and the environment and returned to beneficial use as expeditiously as possible. Maximizing the use of special accounts to facilitate site cleanup and/or redevelopment is one of the Task Force's recommendations EPA continues to work on. The "Updated Consolidated Guidance on the Establishment, Management, and Use of CERCLA Special Accounts" was issued on August

[50] The Superfund Task Force Final Report can be found here: https://www.epa.gov/sites/production/files/2019-09/documents/sftfreport_v17-9-5_for508s.pdf.

5, 2019.[51] The guidance document addressed the Superfund Task Force report's recommendation specific to special accounts with a more robust discussion about when to establish a special account; types of funds that can be deposited in a special account; activities that may be funded through a special account; timing for use of special account funds; providing special account funds to external parties to conduct response actions; and management of special accounts. The issuance of this guidance completed this recommendation of the Superfund Task Force report.

FY 2019 Special Account Activity

Since the inception of special accounts through the end of FY 2019, EPA has collected approximately $7.4 billion from parties and earned more than $585.2 million in interest. Approximately 56 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 44 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 $35.8 million to the Superfund Trust Fund. As of the end of FY 2019, over $4.0 billion has been disbursed for site response actions and approximately $388.4 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 2019, EPA deposited more than $374.4 million into special accounts and disbursed and obligated over $249.9 million from special accounts (including reclassifications). At the end of FY 2019, the cumulative amount available in special accounts was approximately $3.45 billion.

Special accounts vary in size. A limited set represent the majority of the funds available. At the end of FY 2019, 5 percent of open accounts had greater than $10 million available and hold more than 72 percent of all available funds in open accounts. There are many accounts with lower available balances. 72 percent of all open accounts with up to $1 million available represent only 5 percent of available funds in all open accounts.

The balance of approximately $3.45 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. This is due to 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 $1.3 billion of currently available special account funds over the next 5 years, but funds also are planned much further into the future to

[51] For a copy of the guidance, please see: https://semspub.epa.gov/work/HQ/100002182.pdf.

continue activities such as conducting five year reviews or remedy optimization where waste has been left in place.

In FY 2019, EPA disbursed and obligated approximately $236.7 million from special accounts (excluding reclassifications) for response work at more than 650 Superfund sites. Some examples include $39.8 million to support work at the New Bedford Harbor site in Massachusetts, $27.3 million for the Welsbach & General Gas Mantle (Camden Radiation) site in New Jersey, and more than $12 million for the Atlantic Wood Industries, Inc. site in Virginia. Without special account funds being available, appropriated funds would have been necessary for these response actions to be funded. In other words, EPA was able to fund approximately $236.7 million in response work at sites in addition to the work funded through appropriated funds obligated or disbursed in FY 2019.

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 2019 program activity, and planned multi-year uses of the available balance. Exhibit 2 provides the prior year (FY 2019), current year (FY 2020), and estimated future budget year (FY 2021) activity for special accounts. Exhibit 3 provides prior year data (FY 2019) by EPA regional offices to exhibit the geographic use of the funds.

Exhibit 1: Summary of FY 2019 Special Account Transactions and Cumulative Multi-Year Plans for Using Available Special Account Funds

Account Status[1]	Number of Accounts
Cumulative Open	1,104
Cumulative Closed	389
FY 2019 Special Account Activity	**$ in Thousands**
Beginning Available Balance	$3,287,875.2
FY 2019 Activities	
+ Receipts	$374,438.1
- Transfers to Superfund Trust Fund (Receipt Adjustment)	($2,794.5)
+ Net Interest Earned	$36,866.1
- Net Change in Unliquidated Obligations	$68,492.1
- Disbursements - For EPA Incurred Costs	($300,105.6)
- Disbursements - For Work Party Reimbursements under Final Settlements	($5,058.7)
- Reclassifications	($13,268.5)
End of Fiscal Year (EOFY) Available Balance[2]	$3,446,444.3
Multi-Year Plans for EOFY 2019 Available Balance[3]	**$ in Thousands**
2019 EOFY Available Balance	$3,446,444.3
- Estimates for Future EPA Site Activities based on Current Site Plans[4]	$3,221,681.1
- Estimates for Potential Disbursement to Work Parties Identified in Final Settlements[5]	$85,331.1
- Estimates for Reclassifications for FYs 2019-2021[6]	$106,760.3
- Estimates for Transfers to Trust Fund for FYs 2019-2021[6]	$26,719.8
- Available Balance to be Planned for Site-Specific Response[7]	$5,952.0

[1] FY 2019 data is as of 10/01/2019. The Beginning Available Balance is as of 10/01/2018.
[2] Numbers may not add due to rounding.
[3] Planning data were recorded in the Superfund Enterprise Management System (SEMS) as of 11/7/2019 in reference to special account available balances as of 10/01/2019.
[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 the EPA determines what funds are needed to complete site-specific response activities.
[7] These include resources received by the 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 2019 – FY 2021[1]

	FY 2019	FY 2020 estimate	FY 2021 estimate
	$ in Thousands		
Beginning Available Balance	$3,287,875.2	$3,446,444.3	$3,500,000.0
Receipts[2,3]	$374,438.1	$290,000.0	$290,000.0
Transfers to Trust Fund (Receipt Adjustment)[3]	($2,794.5)	($2,300.0)	($2,300.0)
Net Interest Earned[3,4]	$36,866.1	$44,000.0	$44,000.0
Net Obligations[3,5]	($236,672.2)	($260,000.0)	($260,000.0)
Reclassifications[3]	($13,268.5)	($15,000.0)	($15,000.0)
End of Year Available Balance[6]	$3,446,444.3	$3,500,000.0	$3,550,000.0

[1] FY 2019 data is as of 10/01/2019. The Beginning Available Balance is as of 10/01/2018.
[2] The estimates for Receipts are in line with more typical years.
[3] The estimates for Receipts, Transfers to Trust Fund, Net Interest, Net Obligations, and Reclassifications are based on a three-year historical average.
[4] FY 2019 net interest earned does not include interest earned from an investment which matured in September 2019. Interest earned was posted in EPA's Special Account Interest database the following month.
[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.

Exhibit 3: FY 2019 Special Account Transactions by EPA Regional Offices

$ 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	$225,319.0	$27,803.5	($750.9)	$3,326.5	($46,296.9)	($4,415.3)	$204,986.0
Region 2	$524,373.3	$94,389.5	$0.0	$5,919.6	($63,817.2)	($3,536.9)	$557,328.4
Region 3	$138,124.8	$68,972.0	$0.0	$1,505.4	($19,394.7)	($827.0)	$188,380.5
Region 4	$74,907.9	$3,803.7	($1,242.2)	$707.8	($6,718.7)	($542.1)	$70,916.5
Region 5	$400,381.1	$14,517.1	($0.8)	$4,344.1	($16,809.5)	($2,507.0)	$399,925.1
Region 6	$106,200.8	$26,282.8	$0.0	$1,164.0	($10,799.9)	($92.6)	$122,755.1
Region 7	$150,740.2	$14.953.6	$0.0	$1,875.9	($16,707.7)	($708.6)	$150,153.3
Region 8	$204,478.3	$80,125.9	($800.7)	$2,372.6	($13,316.4)	($128.4)	$272,731.3
Region 9	$1,317,793.5	$22,793.2	$0.0	$13,494.9	($25,215.2)	($459.3)	$1,328,407.0
Region 10	$145,556.2	$20,796.8	$0.0	$2,155.2	($17,595.9)	($51.2)	$150,861.1
Total	$3,287,875.2	$374,438.1	($2,794.5)	$36,866.1	($236,672.2)	($13,268.5)	$3,446,444.3

[1] FY 2019 data is as of 10/01/2019. The Beginning Available Balance is as of 10/01/2018.
[2] Numbers may not add due to rounding.

Leaking Underground Storage Tanks

Table of Contents – Leaking Underground Storage Tanks

Program Projects in LUST 535
Enforcement 537
Civil Enforcement 538
Operations and Administration 540
Acquisition Management 541
Central Planning, Budgeting, and Finance 542
Facilities Infrastructure and Operations 544
Underground Storage Tanks (LUST/UST) 546
LUST / UST 547
LUST Prevention 550
LUST Cooperative Agreements 551
Program Project Description: 551
Research: Sustainable Communities 554
Research: Sustainable and Healthy Communities 555

APPROPRIATION: Leaking Underground Storage Tanks
Resource Summary Table

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Leaking Underground Storage Tanks				
Budget Authority	$98,172.9	$91,941.0	$48,218.0	-$43,723.0
Total Workyears	41.1	46.6	40.7	-5.9

Bill Language: Leaking and Underground Storage Tank Trust Fund Program

For necessary expenses to carry out leaking underground storage tank cleanup activities authorized by subtitle I of the Solid Waste Disposal Act, $48,218,000, to remain available until expended, of which $48,218,000 shall be for carrying out leaking underground storage tank cleanup activities authorized by section 9003(h) of the Solid Waste Disposal Act: 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.

Program Projects in LUST

(Dollars in Thousands)

Program Project	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Enforcement				
Civil Enforcement	$678.1	$620.0	$541.0	-$79.0
Operations and Administration				
Central Planning, Budgeting, and Finance	$258.3	$321.0	$450.0	$129.0
Facilities Infrastructure and Operations	$847.2	$868.0	$796.0	-$72.0
Acquisition Management	$70.2	$163.0	$138.0	-$25.0
Subtotal, Operations and Administration	$1,175.7	$1,352.0	$1,384.0	$32.0
Underground Storage Tanks (LUST / UST)				
LUST / UST	$10,133.9	$9,240.0	$7,149.0	-$2,091.0
LUST Cooperative Agreements	$59,225.6	$55,040.0	$38,840.0	-$16,200.0
LUST Prevention	$26,829.1	$25,369.0	$0.0	-$25,369.0
Subtotal, Underground Storage Tanks (LUST / UST)	$96,188.6	$89,649.0	$45,989.0	-$43,660.0

Program Project	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$130.5	$320.0	$304.0	-$16.0
TOTAL LUST	**$98,172.9**	**$91,941.0**	**$48,218.0**	**-$43,723.0**

Enforcement

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$160,202.2	$167,615.0	$157,820.0	-$9,795.0
Leaking Underground Storage Tanks	***$678.1***	***$620.0***	***$541.0***	***-$79.0***
Inland Oil Spill Programs	$2,393.3	$2,413.0	$2,462.0	$49.0
Total Budget Authority	$163,273.6	$170,648.0	$160,823.0	-$9,825.0
Total Workyears	908.3	916.2	857.1	-59.1

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, states, local agencies, 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.[1] The Enforcement and Compliance Assurance Program uses its Leaking Underground Storage Tanks (LUST) resources to oversee cleanups by responsible parties.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, EPA will work with states and tribes on a case-by-case basis to prioritize LUST enforcement goals for cleanup. The Agency will continue to provide guidance, technical assistance, oversight, and training to enforce cleanups at LUST sites by responsible parties.

[1] For more information, please refer to: www.epa.gov/swerust1/cat/index.htm.

Performance Measure Targets:

(PM 434) Millions of pounds of pollutants and waste reduced, treated, or eliminated through concluded enforcement actions.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					325	325	325	325	Millions of Pounds
Actual	1,221	1,030	62,223	461	810	347			

(PM 436) Number of all referred no complaint filed (RNCF) civil judicial cases that are more than 2.5 years old.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target						129	120	120	Cases
Actual						94			

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$5.0) This change is a decrease due to the recalculation of base payroll costs.
- (-$74.0 / -0.3 FTE) The net program change reflects EPA's efforts to target funds to the highest priority 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 authority); Subtitle I of the Solid Waste Disposal Act.

Operations and Administration

Acquisition Management
Program Area: Operations and Administration
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$33,799.8	$30,945.0	$29,621.0	-$1,324.0
Leaking Underground Storage Tanks	***$70.2***	***$163.0***	***$138.0***	***-$25.0***
Hazardous Substance Superfund	$18,593.2	$20,533.0	$22,982.0	$2,449.0
Total Budget Authority	$52,463.2	$51,641.0	$52,741.0	$1,100.0
Total Workyears	261.2	285.7	259.5	-26.2

Program Project Description:

Leaking Underground Storage Tank (LUST) resources in the Acquisition Management Program support the Agency's contract activities.

FY 2021 Activities and Performance Plan:

Work in this program supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. Acquisition Management resources in LUST support information technology needs and the training and development of EPA's acquisition workforce.

Performance Measure Targets:

Work under this program supports performance results in the Acquisition Management Program under the EPM appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$25.0) This program change reflects a reduction as a result of more effective business practices in the Acquisition Management 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); Subtitle I of the Solid Waste Disposal Act.

Central Planning, Budgeting, and Finance
Program Area: Operations and Administration
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$72,920.6	$71,423.0	$76,603.0	$5,180.0
Leaking Underground Storage Tanks	***$258.3***	***$321.0***	***$450.0***	***$129.0***
Hazardous Substance Superfund	$23,772.7	$21,971.0	$22,462.0	$491.0
Total Budget Authority	$96,951.6	$93,715.0	$99,515.0	$5,800.0
Total Workyears	421.4	456.0	435.3	-20.7

Total workyears in FY 2021 include 1.0 FTE funded by TSCA fees and 1.0 FTE funded by e-Manifest fees.
Total workyears in FY 2021 include 39.0 FTE to support Central Planning, Budgeting, and Finance working capital fund (WCF) services.

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 developing, managing, and supporting a performance management system consistent with the Government Performance and Results Modernization Act of 2010 that involves: strategic planning and accountability for environmental, fiscal, and managerial results; providing policy, systems, training, reports, and oversight essential for the financial operations of EPA; managing the agencywide Working Capital Fund; providing financial payment and support services for specialized fiscal and accounting services for the LUST programs; and managing the Agency's annual budget process.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 - 2022 EPA Strategic Plan*. EPA will continue to ensure sound financial and budgetary management of the LUST Program through the use of routine and ad hoc analysis, statistical sampling, and other evaluation 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.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$164.0) This change is an increase due to recalculation of base payroll costs.

- (-$35.0 / -0.4 FTE) This net program change is a decrease as the Agency streamlines in the areas of strategic planning, budget preparation, financial reporting, and transaction processing.

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
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$321,500.4	$287,595.0	$317,345.0	$29,750.0
Science & Technology	$67,856.9	$65,372.0	$67,908.0	$2,536.0
Building and Facilities	$23,017.8	$26,922.0	$33,377.0	$6,455.0
Leaking Underground Storage Tanks	***$847.2***	***$868.0***	***$796.0***	***-$72.0***
Inland Oil Spill Programs	$577.3	$665.0	$682.0	$17.0
Hazardous Substance Superfund	$82,243.2	$76,473.0	$76,831.0	$358.0
Total Budget Authority	$496,042.8	$457,895.0	$496,939.0	$39,044.0
Total Workyears	329.9	315.4	307.6	-7.8

Total workyears in FY 2021 include 2.1 FTE to support Facilities Infrastructure and Operations working capital fund (WCF) services.

Program Project Description:

EPA's Facilities Infrastructure and Operations Program in the Leaking Underground Storage Tank (LUST) appropriation supports the Agency's rent, transit subsidy, and facilities management services. Funding is allocated for such services among the major appropriations for the Agency.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. The Agency will continue to conduct rent reviews and verify monthly billing statements for its lease agreements with the General Services Administration and private landlords. For FY 2021, EPA is requesting a total of $0.62 million 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.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$72.0) This program change is a decrease to basic operations and maintenance costs.

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); Subtitle I of the Solid Waste Disposal Act.

Underground Storage Tanks (LUST/UST)

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$11,089.8	$10,750.0	$6,863.0	-$3,887.0
Leaking Underground Storage Tanks	***$10,133.9***	***$9,240.0***	***$7,149.0***	***-$2,091.0***
Total Budget Authority	$21,223.7	$19,990.0	$14,012.0	-$5,978.0
Total Workyears	89.1	91.6	68.8	-22.8

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. Under this program, EPA issues, monitors, and oversees LUST cleanup cooperative agreements to states.[2] 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 2019, 57,308 LUST sites had not achieved cleanup completion.[3]

In addition, EPA has direct implementation authority and responsibilities in Indian Country. In that role, 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.

Cleaning up LUST sites protects people from exposure to contaminants such as benzene, a known carcinogen, and makes land available for reuse. A 2018 study found that high profile UST releases decrease nearby property values 2 to 6 percent. Then, once a cleanup is completed, nearby property values rebound by a similar margin.[4] In 2019, cleanups were completed at 8,358 LUST sites.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent

[2] 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.
[3] Please see EPA website: http://www.epa.gov/ust/ust-performance-measures.
[4] 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.

Contamination, in the *FY 2018 – 2022 EPA Strategic Plan.* EPA's ambitious 11,200 annual target for the number of LUST sites that meet risk-based standards for human exposure and groundwater migration has proven especially challenging. EPA has intensively engaged state partners to identify long-term strategies to meet the long-term performance goal of completing 56,000 additional LUST cleanups between FY 2018-2022. In FY 2019, LUST cleanups increased to 8,358 representing the first annual increase in such cleanups since FY 2013.

EPA will continue to collect and analyze information about the initiation and cleanup of UST releases. This information will chart progress toward achieving its annual performance goal of completing 11,200 cleanups in FY 2021 and inform EPA's work with its state partners to increase the number of cleanups completed. As part of that effort, EPA and individual states may initiate Kaizen process improvement events if EPA and the state determine the Kaizen event will help streamline a state's process.

In FY 2021, EPA will:

- Work with states and tribes within available resources 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.

- Monitor the soundness of financial mechanisms, in particular, insurance and state cleanup funds that serve as financial assurance for LUST releases; ensuring 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.[5]

[5] For more information, please see: http://astswmo.org/compendium-of-emergency-response-actions-at-underground-storage-tank-sites-version-2/.

Performance Measure Targets:

Work under this program supports performance results in the LUST Cooperative Agreements Program under the LUST appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$582.0) This change is an increase due to the recalculation of base payroll costs.

- (-$2,673.0 / -5.2 FTE) This net program change reflects a focus on cleaning up the highest priority LUST sites in Indian Country and a reduction in resources that provide subject matter and technical expertise to states and tribes.

Statutory Authority:

Resource Conservation and Recovery Act §§ 8001, 9001-9014.

LUST Prevention

Program Area: Underground Storage Tanks (LUST / UST)
Goal: A Cleaner, Healthier Environment
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Leaking Underground Storage Tanks	***$26,829.1***	***$25,369.0***	***$0.0***	***-$25,369.0***
Total Budget Authority	$26,829.1	$25,369.0	$0.0	-$25,369.0

Program Project Description:

The Leaking Underground Storage Tank (LUST) Prevention Program works to ensure that groundwater is protected from petroleum and associated chemicals leaking from underground storage tanks (USTs). The LUST Cooperative Agreement Program provides funding to states to assess and clean up LUST sites. This program has provided funding to states,[6] tribes, and/or intertribal consortia to inspect, prevent releases, ensure compliance with federal and state laws, and enforce these laws for the 549,583 federally regulated active USTs.[7] The Energy Policy Act (EPAct) of 2005 requires EPA or states to inspect every UST once every three years.

FY 2021 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2021. States could elect to maintain core program work with state resources rather than federal resources.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$25,369.0) This funding change proposes to eliminate the LUST Prevention Program.

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.

[6] 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.
[7] See EPA website: http://www.epa.gov/ust/ust-performance-measures.

LUST Cooperative Agreements
Program Area: Underground Storage Tanks (LUST / UST)
Goal: A Cleaner, Healthier Environment
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Leaking Underground Storage Tanks	***$59,225.6***	***$55,040.0***	***$38,840.0***	***-$16,200.0***
Total Budget Authority	$59,225.6	$55,040.0	$38,840.0	-$16,200.0

Program Project Description:

This funding is used to award cooperative agreements to states[8] 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.[9] 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 remediating soil contamination.[10] 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.[11]

In 2016, EPA released a study called "Property Value Study of High-Profile UST Release Sites." The purpose of the study was to determine the 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.[12]

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[8] 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.
[9] 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).
[10] Please see *The National LUST Cleanup Backlog: A Study Of Opportunities*, September 2011, http://www.epa.gov/ust/national-lust-cleanup-backlog-study-opportunities.
[11] Please see *Technologies for Treating MtBE and Other Fuel Oxygenates*, May 2004, pages 2-6 and 2-7, https://clu-in.org/download/remed/542r04009/542r04009.pdf.
[12] 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.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination, in the *FY 2018 – 2022 EPA Strategic Plan.* EPA's ambitious 11,200 annual target for the number of LUST sites that meet risk-based standards for human exposure and groundwater migration has proven especially challenging. EPA has intensively engaged state partners to identify long-term strategies to meet the long-term performance goal of completing 56,000 additional LUST cleanups between FY 2018-2022. In FY 2019, LUST cleanups increased to 8,358 representing the first annual increase in such cleanups since FY 2013.

EPA will continue to collect and analyze information about the initiation and cleanup of UST releases. This information will chart progress toward achieving its annual performance goal of completing 11,200 cleanups in FY 2021 and inform EPA's work with its state partners to increase the number of cleanups completed. As part of that effort, EPA and individual states may initiate Kaizen process improvement events if EPA and the state determine the Kaizen event will help streamline a state's process.

In FY 2021, EPA will:

- 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 44 percent between the end of 2008 and the end of 2019 (from 102,798 to 57,308). As of September 2019, 57,308 releases remain that have not reached cleanup completion.[13]

- 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 more than 8,000 cleanups annually, whereas, if EPA were to apply the funding directly, only about 390 cleanups would occur annually (assuming an average cleanup cost of $141,000 per site).[14]

- 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.[15]

[13] Please see EPA website: http://www.epa.gov/ust/ust-performance-measures.
[14] Average cleanup cost per site based on ASTSWMO's 2018 Annual State Fund Survey Results at: http://astswmo.org/state-fund-survey-results-2018/.
[15] For more information, please see: http://astswmo.org/compendium-of-emergency-response-actions-at-underground-storage-tank-sites-version-2/.

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 2021, 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 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target	9,000	8,600	8,600	8,600	11,200	11,200	11,200	11,200	Cleanups
Actual	10,393	9,869	8,977	8,775	8,128	8,358			

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$16,200.0) This program change reflects a focus on cleaning up the highest priority sites.

Statutory Authority:

Resource Conservation and Recovery Act § 9003(h)(7).

Research: Sustainable Communities

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Science & Technology	$135,083.1	$132,477.0	$58,597.0	-$73,880.0
Leaking Underground Storage Tanks	***$130.5***	***$320.0***	***$304.0***	***-$16.0***
Inland Oil Spill Programs	$599.6	$664.0	$522.0	-$142.0
Hazardous Substance Superfund	$11,004.7	$16,463.0	$11,448.0	-$5,015.0
Total Budget Authority	$146,817.9	$149,924.0	$70,871.0	-$79,053.0
Total Workyears	411.9	421.8	294.6	-127.2

Program Project Description:

EPA's Sustainable and Healthy Communities (SHC) Research Program under the Leaking Underground Storage Tanks (LUST) appropriation provides federal, regional, and community decision-makers with tools, methods, and information to prevent leaking underground storage tanks and mitigate release at LUST sites. Specifically, this research provides information and tools designed to enable decision-makers to better:

- Assess sites and evaluate the implications of alternative remediation techniques, policies, and management actions to assess and cleanup leaks at fueling stations.
- Identify the environmental impacts and unintended consequences of existing and new biofuels available in the marketplace.
- Protect America's land, groundwater resources, and drinking water supplies that could be impacted by the Nation's more than 550 thousand underground fuel storage tanks.[16]

The SHC Research Program is one of six integrated and transdisciplinary research programs in the Research and Development Program. Each of the six integrated and transdisciplinary research 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 implemented with their active collaboration and involvement. As part of the FY 2021 Budget, the new SHC FY 2019-2022 StRAP builds upon prior SHC StRAPs and continues a practice of conducting innovative scientific research aimed at solving the problems encountered by Agency partners and stakeholders.

Recent Accomplishments of the SHC Research Program include:

- **Using GIS to Address Vulnerability of Underground Storage Tanks (USTs) to Flooding:** Fueling stations are critical in disaster response and are potential sites of fuel

[16] For more information, please see: https://www.epa.gov/ust.

releases in flooding events. In Hurricane Harvey, for example, approximately 1,200 Underground Storage Tanks (USTs) containing up to 15.4 million gallons of fuel were inundated. Across the Nation, there are approximately 33,000 USTs within the Federal Emergency Management Agency's (FEMA) estimated 100-year floodplains. This research is focused on systematically assessing storm and flood risk at UST sites to help EPA's Land and Emergency Management Program identify protection strategies to "harden" facilities against damage at each location, ensuring readiness and preventing releases. This research was presented to the Association of State and Territorial Waste Management Officials in May 2019.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in the *FY 2018 – 2022 EPA Strategic Plan.* Specifically, this work will aim to characterize sites and contaminants released from LUSTs identified under the LUST Trust Fund with an emphasis on assisting the Agency and states in addressing the backlog of sites for remediation. Also, this 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 and states return properties to productive use, thus supporting the Agency's mission of protecting human health and the environment in the context of communities. Such work is integral to achieving EPA's priority of revitalizing land and preventing contamination.

In FY 2021, EPA research under SHC will develop models, metrics, and spatial tools for EPA regions and states to evaluate the vulnerability of groundwater to LUSTs and the subsequent human health risks that follow contamination. New data collection methods will be used to identify groundwater wells nationally, which then will be used to develop a groundwater vulnerability model at local, state, and national scales. SHC also will assist EPA's Underground Storage Tanks Program, other programs, and states by updating technical guidance manuals and evaluations of risk to underground storage tank system components from new fuel formulations.

***Research Planning**:*

EPA's Board of Scientific Counselors (BOSC) is a federal advisory committee that provides advice and recommendations to EPA on technical and management issues of its research programs. The SHC Research Program will continue to meet regularly over the next several years with the BOSC SHC subcommittee to seek input on topics related to research program design, science quality, innovation, relevance, and impact.

The Agency assesses its research performance through the distribution of research evaluation surveys to key users of its research products. This provides evidence for how research products are being used, by whom, and the degree of satisfaction product users have with research product quality, usability, and timeliness of delivery. Through the evaluation process, the Agency identifies its strengths and finds targeted areas for improvement to its research programs.

EPA's state engagement[17] 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 agencies. Key partners at the state level include: the Environmental Council of the States, with its Environmental Research Institute of the States and Interstate Technology and Regulatory Council; the Association of State and Territorial Health Officials; as well as state media associations, such as the Association of State and Territorial Solid Waste Management Officials.

Performance Measure Targets:

Work under this program supports performance results in the Research: Sustainable and Healthy Communities Program under the S&T appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$176.0) This change is an increase due to the recalculation of base payroll costs.
- (-$192.0) This program change streamlines research to characterize and remediate contaminated leaking UST sites.

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.

[17] For more information on EPA's engagement with states, please see: https://www.epa.gov/research/epa-research-solutions-states.

Table of Contents – Inland Oil Spill Programs

Program Projects in Inland Oil Spill Programs 561
Compliance 562
Compliance Monitoring 563
Enforcement 565
Civil Enforcement 566
Oil 568
Oil Spill: Prevention, Preparedness and Response 569
Operations and Administration 571
Facilities Infrastructure and Operations 572
Research: Sustainable Communities 574
Research: Sustainable and Healthy Communities 575

APPROPRIATION: Inland Oil Spill Programs
Resource Summary Table
(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Inland Oil Spill Programs				
Budget Authority	$17,368.1	$19,581.0	$16,631.0	-$2,950.0
Total Workyears	79.7	84.8	75.7	-9.1

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, $16,631,000, to be derived from the Oil Spill Liability trust fund, to remain available until expended.

Program Projects in Inland Oil Spill Programs
(Dollars in Thousands)

Program Project	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Compliance				
Compliance Monitoring	$82.8	$139.0	$0.0	-$139.0
Enforcement				
Civil Enforcement	$2,393.3	$2,413.0	$2,462.0	$49.0
Oil				
Oil Spill: Prevention, Preparedness and Response	$13,715.1	$15,700.0	$12,965.0	-$2,735.0
Operations and Administration				
Facilities Infrastructure and Operations	$577.3	$665.0	$682.0	$17.0
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$599.6	$664.0	$522.0	-$142.0
TOTAL Inland Oil Spill Programs	**$17,368.1**	**$19,581.0**	**$16,631.0**	**-$2,950.0**

Compliance

Compliance Monitoring
Program Area: Compliance
Goal: More Effective Partnerships
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$100,132.8	$101,665.0	$95,649.0	-$6,016.0
Inland Oil Spill Programs	***$82.8***	***$139.0***	***$0.0***	***-$139.0***
Hazardous Substance Superfund	$1,313.8	$995.0	$1,004.0	$9.0
Total Budget Authority	$101,529.4	$102,799.0	$96,653.0	-$6,146.0
Total Workyears	447.1	453.9	427.7	-26.2

Program Project Description:

The Compliance Monitoring Program is a component of EPA's 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 and Spill Prevention, Control, and Countermeasure systems into EPA's Integrated Compliance Information System.

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021. Work will be maintained under the Oil Spill: Prevention, Preparedness, and Response Program under the Inland Oil Spill Programs appropriation.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$139.0 / -0.8 FTE) This program change proposes to eliminate the Compliance Monitoring program under the Inland Oil Spills Trust Fund.

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

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$160,202.2	$167,615.0	$157,820.0	-$9,795.0
Leaking Underground Storage Tanks	$678.1	$620.0	$541.0	-$79.0
Inland Oil Spill Programs	***$2,393.3***	***$2,413.0***	***$2,462.0***	***$49.0***
Total Budget Authority	$163,273.6	$170,648.0	$160,823.0	-$9,825.0
Total Workyears	908.3	916.2	857.1	-59.1

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 U.S. Department of Justice, states, local agencies, 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 orders or penalty actions, 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 assists in the recovery of cleanup costs expended by the government and provides support for field investigations of spills, Spill Prevention, Control, and Countermeasure, Facility Response Plan and other requirements.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Compliance with the Law in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, 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. Civil Enforcement efforts will focus on facilities where enforcement will promote deterrence, 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:

(PM 434) Millions of pounds of pollutants and waste reduced, treated, or eliminated through concluded enforcement actions.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					325	325	325	325	Millions of Pounds
Actual	1,221	1,030	62,223	461	810	347			

(PM 436) Number of all referred no complaint filed (RNCF) civil judicial cases that are more than 2.5 years old.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target						129	120	120	Cases
Actual						94			

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$436.0) This change is an increase due to the recalculation of base payroll costs.
- (-$387.0) This net program change continues necessary support to the Program's workforce in carrying out enforcement of the Oil Pollution Act of 1990.

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: A Cleaner, Healthier Environment
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Inland Oil Spill Programs	***$13,715.1***	***$15,700.0***	***$12,965.0***	***-$2,735.0***
Total Budget Authority	$13,715.1	$15,700.0	$12,965.0	-$2,735.0
Total Workyears	66.7	70.6	62.3	-8.3

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 ensure national safety and security for chemical and oil incidents.[1]

There are approximately 550,000 Spill Prevention, Control, and Countermeasure (SPCC) facilities, including a subset of 3,800 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 minimize the potential impacts to human health and the environment, the Agency will target inspection at facilities that pose the highest risk. The Agency currently inspects approximately 0.12 percent of SPCC facilities per year. By the end of FY 2019, EPA found 79 percent of active SPCC facilities to be out of compliance at the time of the inspection.[2] Inspections are essential in ensuring that facility staff is knowledgeable about prevention and response plans, and quickly able to put these plans into action.

EPA is the lead federal response agency for oil spills occurring in inland waters. EPA receives all spill notifications at the National Response Center and retains the responsibility to ensure that all inland oil spills are responded to within 12 hours. EPA works closely with state and local first responders on smaller spills and leads 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. During FY 2019, EPA responded to approximately 120 oil spills across the Nation.

[1] For additional information, please refer to: https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations.
[2] Information from the EPA Oil database.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, the Oil Spill Prevention, Preparedness and Response Program will:

- Inspect oil facilities to ensure compliance with preventive measures. Inspections involve reviewing the facility's preparedness and response plans, discussing key aspects of these plans with facility staff, and conducting unannounced exercises that test the facility owner's ability to put these preparedness and response plans into action. EPA will focus inspections at high risk FRP facilities.

- Maintain the National Contingency Plan's Subpart J product schedule, which identifies a list of products that may be used to clean oil spills.

- Maintain the National Oil Database, which compiles data for the Program. The database manages information obtained from new and historical inspections and has streamlined the process for assisting facilities with compliance and equipping inspectors with more efficient inspection processes.

- Deliver required annual oil spill inspector training to federal and state inspectors.

EPA is proposing to develop a new program that would authorize EPA to collect and use fees for compliance assistance to assist FRP and SPCC facilities in complying with EPA regulations. This fee and service will be voluntary.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to the program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$1,444.0) This change is an increase due to the recalculation of base payroll costs.

- (-$4,179.0 / -8.3 FTE) This net program change is to focus on SPCC and FRP facility inspections on facilities that pose the highest risk. It also reduces specialized training opportunities for the Agency's On-Scene Coordinators and updates to regional Area Contingency Plans.

Statutory Authority:

Oil Pollution Act.

Operations and Administration

Facilities Infrastructure and Operations
Program Area: Operations and Administration
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Improve Efficiency and Effectiveness

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$321,500.4	$287,595.0	$317,345.0	$29,750.0
Science & Technology	$67,856.9	$65,372.0	$67,908.0	$2,536.0
Building and Facilities	$23,017.8	$26,922.0	$33,377.0	$6,455.0
Leaking Underground Storage Tanks	$847.2	$868.0	$796.0	-$72.0
Inland Oil Spill Programs	***$577.3***	***$665.0***	***$682.0***	***$17.0***
Hazardous Substance Superfund	$82,243.2	$76,473.0	$76,831.0	$358.0
Total Budget Authority	$496,042.8	$457,895.0	$496,939.0	$39,044.0
Total Workyears	329.9	315.4	307.6	-7.8

Total workyears in FY 2021 include 2.1 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.5, Improve Efficiency and Effectiveness in the *FY 2018 – 2022 EPA Strategic Plan*. The Agency will continue to conduct rent reviews and verify monthly billing statements for its lease agreements with the General Services Administration and private landlords. For FY 2021, EPA is requesting $0.51 million 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.

Performance Measures Target:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$17.0) This program change is an increase for facility 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); Oil Pollution Act.

Research: Sustainable Communities

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Science & Technology	$135,083.1	$132,477.0	$58,597.0	-$73,880.0
Leaking Underground Storage Tanks	$130.5	$320.0	$304.0	-$16.0
Inland Oil Spill Programs	***$599.6***	***$664.0***	***$522.0***	***-$142.0***
Hazardous Substance Superfund	$11,004.7	$16,463.0	$11,448.0	-$5,015.0
Total Budget Authority	$146,817.9	$149,924.0	$70,871.0	-$79,053.0
Total Workyears	411.9	421.8	294.6	-127.2

Program Project Description:

EPA is the lead federal on-scene coordinator for inland oil spills and provides technical assistance, when needed, for coastal spills.[3] EPA is responsible for oil spill preparedness, response, and associated research, as well as having the lead role in developing protocols for testing spill response products and agents, which is planned with the assistance of partner agencies.[4]

The Sustainable and Healthy Communities (SHC) Research Program is one of six integrated and transdisciplinary research programs in the Research and Development Program. Each of the six integrated and transdisciplinary research 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 implemented with their active collaboration and involvement. As part of the FY 2021 Budget, the new SHC FY 2019-2022 StRAP builds upon prior SHC StRAPs and continues a practice of conducting innovative scientific research aimed at solving the problems encountered by agency partners and stakeholders.

The SHC Research Program for inland oil spills, funded through the Oil Spill Liability Trust Fund,[5] provides federal, state, tribal, and community decision-makers with analysis and tools to protect human and ecosystem health from the negative impacts of oil spills. EPA assists 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.

[3] For more information, please see: https://www.epa.gov/emergency-response/epas-scene-coordinators-oscs.
[4] United States Coast Guard, United States Department of the Interior, United States Department of Transportation, and United States Department of Commerce.
[5] For more information, please see: https://www.uscg.mil/Mariners/National-Pollution-Funds-Center/About_NPFC/OSLTF/.

In support of these response efforts, EPA conducts research related to the Agency's National Contingency Plan (NCP) Product Schedule.[6] 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 supplies. EPA 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:

- **Crude oil dispersion in high salinity waters:** Dispersants are response options for addressing oil spills, and their effectiveness is dependent on the spill scenario. Decision-makers typically ask whether there will be sufficient dispersion effectiveness in various levels of water salinity during spills. The response community needs information on whether dispersants could be a viable response option for subsea releases in hypersaline waters such as in the Arctic and Northern Gulf of Mexico. This study, completed in FY 2019, provided a more comprehensive picture pertaining to the influence of salinity on dispersant usage at high salinities.[7] Relevant stakeholders that use this information include states, EPA program and regional offices, the National Oceanic and Atmospheric Administration, United States Coast Guard, United States Department of the Interior-Bureau of Safety and Environmental Enforcement, and the oil industry.

- **Screening of two potential reference oils for dispersant effectiveness, chemical characterization, and toxicity:** Oil spill cleanup requires accurate and concrete data (i.e., safety, storage, application methods, toxicity and effectiveness data, and physical and chemical properties data) to help response crews make decisions about dispersants because each oil responds differently to various dispersants. The technical information provided by these screenings can more accurately inform the public about the cleanup process. Specifically, research completed in FY 2019 tested dispersant effectiveness, chemical properties, and toxicity and the research results improved knowledge that EPA responders need during oil spill cleanup.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.3, Prioritize Robust Science in the *FY 2018 – 2022 EPA Strategic Plan*. Specifically, FY 2021 research will focus on conducting research to support regulatory activities and protocol development for EPA's programs and in support of 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 SHC Research Program will continue to conduct health, environmental engineering, and ecological research, and prepare planning and analysis tools for localities nationwide to use in facilitating regulatory compliance and improving environmental and health outcomes.

[6] For more information, please see: http://www2.epa.gov/emergency-response/national-contingency-plan-subpart-j.
[7] For more information, please see: https://www.epa.gov/land-research/oil-spill-research.

Specific activities in FY 2021 include:

- Conducting studies to develop efficacy protocols for products, refining toxicity thresholds, and evaluating potential new reference oils. These studies will produce new protocols for surface washing agent and solidifier effectiveness, set out an approach for chemical herder effectiveness, and refine toxicity thresholds.

- Conducting research to better understand oil behavior, toxicity thresholds, and remediation options. This study aims to close information gaps pertaining to oil behavior and fate. This study will provide valuable information on the behavior of a variety of oils and treating agents under varying environmental factors. This information is critical for understanding broader ecological/environmental impacts of spilled oil.

- Evaluate the performance of surface washing agents, solidifiers, and oil herding agents used in salt and freshwater responsive to Subpart J of the NCP. EPA also will expand research efforts regarding oil, the characterization of crude oil, and treating agent biodegradation.

Research Planning:

EPA's Board of Scientific Counselors (BOSC) is a federal advisory committee that provides advice and recommendations to EPA's Research and Development Program on technical and management issues of its research programs. The SHC Research Program and the BOSC SHC subcommittee will continue to meet regularly over the next several years to seek input on topics related to research program design, science quality, innovation, relevance, and impact.

The Agency assesses its research performance through the distribution of research evaluation surveys to key users of its research products. This provides evidence for how research products are being used, by whom, and the degree of satisfaction product users have with research product quality, usability, and timeliness of delivery. Through the evaluation process, the Agency identifies its strengths and finds targeted areas for improvement to its research programs.

EPA's state engagement[8] 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. Key partners at the state level include: the Environmental Council of the States, with its Environmental Research Institute of the States and Interstate Technology and Regulatory Council; and the Association of State and Territorial Health Officials.

Performance Measure Targets:

Work under this program supports performance results in the Research: Sustainable and Healthy Communities Program under the S&T appropriation.

[8] For more information on EPA's engagement with sates, please see: https://www.epa.gov/research/epa-research-solutions-states.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$118.0) This change is an increase due to the recalculation of base payroll costs.

- (-$260.0) This program change streamlines research to study the performance and behavior of oil dispersants in deep water and arctic spills, as well as the study of revised protocols for testing oil spill control agents pursuant to the NCP Product Schedule.

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.

State and Tribal Assistance Grants

Table of Contents – State and Tribal Assistance Grants

Program Projects in STAG 584
Categorical Grants 587
Categorical Grant: Beaches Protection 588
Categorical Grant: Brownfields 589
Categorical Grant: Environmental Information 591
Categorical Grant: Hazardous Waste Financial Assistance 594
Categorical Grant: Lead 597
Categorical Grant: Multipurpose Grants 599
Categorical Grant: Nonpoint Source (Sec. 319) 601
Categorical Grant: Nutrients and Harmful Algal Blooms Reduction Grants 602
Categorical Grant: Pesticides Enforcement 604
Categorical Grant: Pesticides Program Implementation 606
Categorical Grant: Pollution Control (Sec. 106) 609
Categorical Grant: Pollution Prevention 613
Categorical Grant: Public Water System Supervision (PWSS) 614
Categorical Grant: Radon 616
Categorical Grant: State and Local Air Quality Management 617
Categorical Grant: Toxics Substances Compliance 620
Categorical Grant: Tribal Air Quality Management 622
Categorical Grant: Tribal General Assistance Program 624
Categorical Grant: Underground Injection Control (UIC) 627
Categorical Grant: Underground Storage Tanks 629
Categorical Grant: Wetlands Program Development 630
State and Tribal Assistance Grants (STAG) 632
Diesel Emissions Reduction Grant Program 633
Brownfields Projects 636
Infrastructure Assistance: Alaska Native Villages 640
Infrastructure Assistance: Clean Water SRF 643
Infrastructure Assistance: Drinking Water SRF 647
Gold King Mine Water Monitoring 652

Infrastructure Assistance: Mexico Border 653
Targeted Airshed Grants 654
Safe Water for Small & Disadvantaged Communities 655
Reducing Lead in Drinking Water 656
Lead Testing in Schools 658
Healthy Schools 660
Drinking Water Infrastructure Resilience and Sustainability 662
Drinking Fountain Lead Testing 664
Technical Assistance for Treatment Works 666
Sewer Overflow Control Grants 668
Water Infrastructure and Workforce Investment 670

APPROPRIATION: State and Tribal Assistance Grants
Resource Summary Table

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants				
Budget Authority	$4,068,673.6	$4,246,232.0	$2,848,310.0	-$1,397,922.0
Total Workyears	8.1	7.0	5.0	-2.0

Bill Language: State and Tribal Assistance Grants

For environmental programs and infrastructure assistance, including capitalization grants for State revolving funds and performance partnership grants, $2,848,310,000, to remain available until expended, of which—

(1) $1,119,778,000 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 which $863,235,000 shall be for making capitalization grants for the Drinking Water State Revolving Funds under section 1452 of the Safe Drinking Water Act: Provided, That 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 2021 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 2021, 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 2021, notwithstanding 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 2021, 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 2021, 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 2021, 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 2021, 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 2021, 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 no less than 10 percent but not more than 20 percent of the funds made available under this title to each State for Clean Water State Revolving Fund capitalization grants and not less than 20 percent but no more than 30 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,

(2) $3,000,000 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;

(3) $80,000,000 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: Provided, That, to the extent there are sufficient qualified applications, not less than $18,000,000 of the amount appropriated shall be for projects located in Qualified Opportunity Zones;

(4) $10,000,000 shall be for grants under title VII, subtitle G of the Energy Policy Act of 2005;

(5) $605,347,000 shall be for grants, including associated program support costs, to States, 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 and 105 of the Clean Air Act for particulate matter monitoring and data collection activities subject to terms and conditions specified by the Administrator, and for grants to address Harmful Algal Blooms (HABs), nutrient pollution, and hypoxia, including research, detection, prediction, monitoring, control, mitigation, response to, and remediation of HABs, nutrient pollution and hypoxia, including their effects on human health or the environment, of which: $31,791,000 shall be for carrying out section 128 of CERCLA; $6,422,000 shall be for Environmental Information Exchange Network grants, including associated program support costs; $11,884,000 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 resources and enhancements to State monitoring programs; $10,000,000 shall be for multipurpose grants for the implementation of mandatory statutory duties in delegated environmental programs;

(6) $50,000,000 shall be for grants to States, federally recognized Indian tribes, public preschools, local educational agencies as defined in 20 U.S.C. 7801(30), and non-profit organizations, for detection, assessment, prevention, control, or abatement of pollution and other environmental hazards in school buildings as defined in 20 U.S.C. 3610(6), and related activities: Provided, That the Federal share of the costs of such activities shall not exceed 75 percent: Provided further, That the Administrator may waive such cost share requirement in the case of schools located in economically distressed communities;

(7) $2,000,000 shall be for grants under section 1459A(l) of the Safe Drinking Water Act (42 U.S.C. 300j–19a(l)), as amended by section 2005 of the America's Water Infrastructure Act of 2018 (Public Law 115–270);

(8) $10,000,000 shall be for grants under section 1465 of the Safe Drinking Water Act (42 U.S.C. 300j–25), as added by section 2006(b) of the America's Water Infra- structure Act of 2018 (Public Law 115–270);

(9) $7,500,000 shall be for grants under section 104(b)(8) of the Federal Water Pollution Control Act (33 U.S.C. 1254(b)(8)), as added by section 4103 of the America's Water Infrastructure Act of 2018 (Public Law 115–270);

(10) $61,450,000 shall be for grants under section 221 of the Federal Water Pollution Control Act (33 U.S.C. 1301), as amended by section 4106 of the America's Water Infrastructure Act of 2018 (Public Law 115–270);

(11) $1,000,000 shall be for grants authorized in section 4304 of the America's Water Infrastructure Act of 2018 (Public Law 115–270);

(12) $15,000,000 shall be for grants under section 1464(d) of the Safe Drinking Water Act (42 U.S.C. 300j–24(d)), as amended by section 2107 of the Water Infra- structure Improvements for the Nation Act (Public Law 114–322) and section 2006(a) of the America's Water Infrastructure Act of 2018 (Public Law 115–270); and

(13) $20,000,000 shall be for grants under section 1459(b) of the Safe Drinking Water Act (42 U.S.C. 300j–19(b)).

Program Projects in STAG

(Dollars in Thousands)

Program Project	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants (STAG)				
Infrastructure Assistance: Alaska Native Villages	$24,469.5	$29,186.0	$3,000.0	-$26,186.0
Brownfields Projects	$91,319.3	$89,000.0	$80,000.0	-$9,000.0
Infrastructure Assistance: Clean Water SRF	$1,625,444.5	$1,638,826.0	$1,119,778.0	-$519,048.0
Infrastructure Assistance: Drinking Water SRF	$1,131,822.3	$1,126,088.0	$863,235.0	-$262,853.0
Infrastructure Assistance: Mexico Border	$14,653.9	$25,000.0	$0.0	-$25,000.0
Diesel Emissions Reduction Grant Program	$99,701.8	$87,000.0	$10,000.0	-$77,000.0
Targeted Airshed Grants	$31,736.7	$56,306.0	$0.0	-$56,306.0
Gold King Mine Water Monitoring	$4,687.3	$4,000.0	$0.0	-$4,000.0
Safe Water for Small & Disadvantaged Communities	$167.0	$25,408.0	$0.0	-$25,408.0
Reducing Lead in Drinking Water	$62.0	$19,511.0	$20,000.0	$489.0
Lead Testing in Schools	$995.0	$26,000.0	$15,000.0	-$11,000.0
Healthy Schools	$0.0	$0.0	$50,000.0	$50,000.0
Drinking Water Infrastructure Resilience and Sustainability	$0.0	$3,000.0	$2,000.0	-$1,000.0
Drinking Fountain Lead Testing	$0.0	$0.0	$10,000.0	$10,000.0
Technical Assistance for Treatment Works	$0.0	$12,000.0	$7,500.0	-$4,500.0

Program Project	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Sewer Overflow Control Grants	$0.0	$28,000.0	$61,450.0	$33,450.0
Water Infrastructure and Workforce Investment	$0.0	$1,000.0	$1,000.0	$0.0
Subtotal, State and Tribal Assistance Grants (STAG)	$3,025,059.3	$3,170,325.0	$2,242,963.0	-$927,362.0
Categorical Grants				
Categorical Grant: Nonpoint Source (Sec. 319)	$166,360.0	$172,348.0	$0.0	-$172,348.0
Categorical Grant: Public Water System Supervision (PWSS)	$96,689.7	$106,250.0	$67,892.0	-$38,358.0
Categorical Grant: State and Local Air Quality Management	$219,874.2	$228,219.0	$151,961.0	-$76,258.0
Categorical Grant: Radon	$7,453.4	$7,789.0	$0.0	-$7,789.0
Categorical Grant: Pollution Control (Sec. 106)				
Monitoring Grants	$17,925.5	$17,267.0	$11,884.0	-$5,383.0
Categorical Grant: Pollution Control (Sec. 106) (other activities)	$207,528.7	$206,022.0	$141,799.0	-$64,223.0
Subtotal, Categorical Grant: Pollution Control (Sec. 106)	$225,454.2	$223,289.0	$153,683.0	-$69,606.0
Categorical Grant: Wetlands Program Development	$12,772.7	$14,183.0	$9,762.0	-$4,421.0
Categorical Grant: Underground Injection Control (UIC)	$9,846.2	$10,164.0	$6,995.0	-$3,169.0
Categorical Grant: Pesticides Program Implementation	$12,435.4	$12,287.0	$8,457.0	-$3,830.0
Categorical Grant: Lead	$13,291.0	$14,049.0	$10,000.0	-$4,049.0
Categorical Grant: Hazardous Waste Financial Assistance	$101,345.0	$96,446.0	$66,381.0	-$30,065.0
Categorical Grant: Pesticides Enforcement	$17,510.6	$24,000.0	$10,531.0	-$13,469.0
Categorical Grant: Pollution Prevention	$5,545.5	$4,610.0	$0.0	-$4,610.0
Categorical Grant: Toxics Substances Compliance	$4,597.4	$4,759.0	$3,276.0	-$1,483.0
Categorical Grant: Tribal General Assistance Program	$67,299.0	$65,476.0	$44,233.0	-$21,243.0
Categorical Grant: Underground Storage Tanks	$1,590.1	$1,449.0	$0.0	-$1,449.0
Categorical Grant: Tribal Air Quality Management	$12,556.1	$12,829.0	$8,963.0	-$3,866.0
Categorical Grant: Environmental Information	$9,619.7	$9,332.0	$6,422.0	-$2,910.0
Categorical Grant: Beaches Protection	$8,985.0	$9,238.0	$0.0	-$9,238.0
Categorical Grant: Brownfields	$49,769.5	$46,190.0	$31,791.0	-$14,399.0
Categorical Grant: Multipurpose Grants	$0.0	$13,000.0	$10,000.0	-$3,000.0
Categorical Grant: Nutrients and Harmful Algal Blooms Reduction Grants	$0.0	$0.0	$15,000.0	$15,000.0
Subtotal, Categorical Grants	$1,042,994.7	$1,075,907.0	$605,347.0	-$470,560.0
Congressional Priorities				

Program Project	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Congressionally Mandated Projects	$619.6	$0.0	$0.0	$0.0
TOTAL STAG	**$4,068,673.6**	**$4,246,232.0**	**$2,848,310.0**	**-$1,397,922.0**

Categorical Grants

Categorical Grant: Beaches Protection

Program Area: Categorical Grants
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$8,985.0***	***$9,238.0***	***$0.0***	***-$9,238.0***
Total Budget Authority	$8,985.0	$9,238.0	$0.0	-$9,238.0

Program Project Description:

EPA's Beaches Protection Grant Program awards grants to eligible coastal states, territories, and tribes to monitor water quality at beaches and to notify the public, through beach advisories and closures, when water quality exceeds applicable standards.

FY 2021 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2021. EPA will encourage states to continue beach monitoring and notification programs.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$9,238.0) This funding change proposes to eliminate the Beaches Protection Grant Program, which supports state beach monitoring and notification programs that are well-established and can continue to be implemented at the local level.

Statutory Authority:

Clean Water Act § 406; Beach Act of 2000; Further Consolidated Appropriations Act, 2020, Pub. L. 116-94.

Categorical Grant: Brownfields
Program Area: Categorical Grants
Goal: A Cleaner, Healthier Environment
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$49,769.5***	***$46,190.0***	***$31,791.0***	***-$14,399.0***
Total Budget Authority	$49,769.5	$46,190.0	$31,791.0	-$14,399.0

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. This program allocates funding to states and tribes to establish core capabilities and enhance their response programs.

Approximately 129 million people (roughly 40 percent of the U.S. population) live within three miles of a brownfields site that received EPA funding.[1] Since its inception, the Brownfields Program has fostered a community-driven approach to the reuse of contaminated sites. As of the end of 2018, the State and Tribal Response Programs have leveraged more than 10,300 jobs and $946 million in other funding. In 2019, EPA provided funding to 165 states, tribes, territories, and the District of Columbia.[2]

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 cleaned up over 2,000 properties and made over 47,000 acres ready for reuse. Addressing brownfields on tribal lands also has leveraged over 1,200 jobs and $218 million. [3]

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, EPA will allocate funding support to approximately 170 state and tribal response programs to oversee the cleanup at approximately 24,800 properties.

[1] U.S. EPA, Office of Land and Emergency Management Estimate 2017. Data collected includes: (1) site information as of the end of FY 2016; and (2) census data from the 2011-2015 American Community Survey.
[2] Data from U.S. EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES).
[3] Data from U.S. EPA ACRES.

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.[4]
- 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.
- 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.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$14,399.0) This program change reduces federal resources for cleanup oversight by states and tribes. EPA will work with states and tribes to prioritize funds to establish core capabilities, enhance their response programs, and identify program efficiencies.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 128(a).

[4] For more information, please refer to: https://www.epa.gov/brownfields/types-brownfields-grant-funding#StateTribalResources.

Categorical Grant: Environmental Information

Program Area: Categorical Grants
Goal: Greater Certainty, Compliance, and Effectiveness
Objective(s): Streamline and Modernize

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$9,619.7***	***$9,332.0***	***$6,422.0***	***-$2,910.0***
Total Budget Authority	$9,619.7	$9,332.0	$6,422.0	-$2,910.0

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. The 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. The EN, in tandem with the Agency's E-Enterprise (EE) efforts, offers its partners tremendous potential for managing, accessing, and analyzing environmental data more effectively and efficiently.

The Exchange Network Grant Program provides funding to states, territories, and tribes to support their participation in the EN using technology, data standards, open-source software, shared services, and reusable tools. EN partners acquire and develop the hardware and software 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 states, tribes, 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, a strategy endorsed by the E-Enterprise Leadership for the future information-sharing architecture of EPA and its partners.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.4, Streamline and Modernize in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, the Environmental Information programs and activities will continue to focus on state, local, and tribal partnerships in supporting government agencies' delivery of environmental protection.

Tribal engagement and participation in EN and EE efforts has significantly increased over the past few years with tribes participating in all the EE/EN 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,[5] EPA anticipates many more tribes will engage in data management and electronic reporting and, consequently, expanded interest in tribal participation

[5] For additional information, please refer to: https://www.ntia.doc.gov/blog/2019/american-broadband-initiative-expand-connectivity-all-americans.

in the EN. In response to this need, beginning in FY 2021, EPA will dedicate STAG EN resources for program administration support to increase tribal engagement in the EN.[6] These resources will support strategic planning and developing implementation approaches for tribes to participate in the EN, build data management and technical capacity, as well as enabling the EN Grant Program to measure the effectiveness of these approaches to meet this goal.

In FY 2021, EPA will continue to support the EN and EE business strategy through a cooperative agreement with the Environmental Council of the States (ECOS) under the associated program support cost authority (Public Law 113-76[7]). This includes direct support to both EN and EE joint governance, each of 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 79 state, tribal, and territorial partners administer qualified EN grants projects. Many will apply the results of Lean efforts within their organizations to implement these streamlining projects. EPA anticipates awarding 15 EN grants in FY 2021 that will assist states, tribes, and territories to implement activities that align with the following five priorities established by the EE/EN governance groups and outlined in the EN Solicitation Notice:

- Expand Data Access and Availability: 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.

- Eliminate Industry Paper Reporting and Expand e-Reporting Among Co-Regulators: Grant projects will support developing and implementing EN air, water, and land data flows that enable automated reporting to EPA systems.

- Integrate Foundational EN Services into Environmental Business Processes: These include Virtual Exchange Services, Shared e-Reporting Services, Federated Identity Management Services, and other data services. These central services hosted by EPA reduce burden and avoid cost by minimizing duplicative application development by states and tribes as they develop their business solutions.

- Improve Environmental Management Through Advanced Data Monitoring and Transmittal Processes: 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.

- 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

[6] EPA is not requesting additional funding to complete these activities, rather the Agency will adjust existing STAG EN resources to enhance program administration support for the benefit of tribal engagement in the Exchange Network.
[7] For additional information, please refer to: https://www.gpo.gov/fdsys/pkg/PLAW-113publ76/pdf/PLAW-113publ76.pdf.

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.[8] 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 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$2,910.0) This program change focuses funding for states, tribes, and territories to develop tools, services, and core capabilities, to increase their ability to share data through the EN and to improve the effectiveness and efficiency of their environmental program management.

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); Further Consolidated Appropriations Act, 2020, Pub. L. 116-94.

[8] For additional information, please refer to: https://www.epa.gov/exchangenetwork/exchange-network-grant-program.

Categorical Grant: Hazardous Waste Financial Assistance

Program Area: Categorical Grants
Goal: A Cleaner, Healthier Environment
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$101,345.0***	***$96,446.0***	***$66,381.0***	***-$30,065.0***
Total Budget Authority	$101,345.0	$96,446.0	$66,381.0	-$30,065.0

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. 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 2020, EPA will revise the allocation formula for Hazardous Waste Financial Assistance Grants that will take effect in FY 2021. The Agency will pursue appropriate updates, including using the most recent data, to better align cooperative agreement funding to state needs, maximizing the environmental benefits and program performance of this funding.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, the Agency (and authorized states) will:

- Issue and renew permits to a portion of the 6,600 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 2019, EPA achieved 124 permit renewals issued at hazardous waste facilities which was 194 percent of the annual permit renewal measure target of 64 renewals.

- 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 2020 Baseline facilities.

- 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.

- 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.

- Continue to improve cleanup approaches, share best practices and cleanup innovations, such as RCRA FIRST (Facilities Investigation Remedy Selection Track),[9] and address issues of emerging science.

- Under EPA's Lean Management System, EPA will monitor progress in issuing permits more quickly without sacrificing permit integrity. This includes progress towards meeting the Agency's goal of reaching all permitting-related decisions in a timely manner. EPA used Lean tools and ELMS to focus on reducing the permit backlog. As a result, some states and regions adopted new practices, such as pre-application meetings and earlier application deadlines, that led to permitting program efficiencies.

Performance Measure Targets:

Work under this program supports performance results in the RCRA Corrective Action Program under the EPM appropriation.

[9] For more information, please visit: https://www.epa.gov/hw/toolbox-corrective-action-resource-conservation-and-recovery-act-facilities-investigation-remedy.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$30,065.0) This program change modifies timelines for reaching cleanup milestones and reviewing facility data, cleanup plans, and permit modifications. Assistance to tribal communities also is curtailed. EPA will work with states and tribes to target funds to core requirements while providing flexibility to address particular priorities.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act § 3011; Further Consolidated Appropriations Act, 2020, Pub. L. 116-94.

Categorical Grant: Lead
Program Area: Categorical Grants
Goal: A Cleaner, Healthier Environment
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$13,291.0***	***$14,049.0***	***$10,000.0***	***-$4,049.0***
Total Budget Authority	$13,291.0	$14,049.0	$10,000.0	-$4,049.0

Program Project Description:

Despite the overall decline of blood lead levels over time, lead exposure remains a significant public health concern for some children because of persistent lead hazards in the environment. Sources of lead include lead-based paint,[10] lead service lines, lead in plumbing material and soil contaminated by historical sources.[11, 12] Children also may be exposed to lead through ingestion of contaminated food; use of folk remedies, cultural products, and consumer products; recreational activities; and take-home exposures from workplaces.[13, 14, 15] Reducing exposure to lead paint in old housing has the potential to significantly decrease blood lead levels in the largest number of children. Efforts to reduce lead paint exposure must include homes and locations outside the home where young children spend significant amounts of time, such as child care settings and schools.

The Lead Categorical Grant Program contributes to this goal by providing support to authorized state and tribal programs that administer training and certification programs for lead professionals and renovation contractors engaged in lead-based paint abatement and renovation, repair and painting (RRP) activities, as well as accreditation of training providers. EPA directly implements these programs in all areas of the country that are not authorized to do so and maintains the Federal Lead-Based Paint Program Database (FLPP) of trained and certified lead-based paint professionals.

[10] Dewalt, F.G., Cox, D.C., O'Haver, R., Salatino, B., Holmes, D., Ashley, P.J., Pinzer, E.A., Friedman, W., Marker, D., Viet, S.M., & Fraser, A. (2015). Prevalence of Lead Hazards and Soil Arsenic in U.S. Housing. *Journal of Environmental Health*, 78(5), 22-29. Retrieved from: http://www.neha.org/node/6429.

[11] *See*, U.S. Environmental Protection Agency (EPA). (2018a). *Lead at Superfund Sites*. Retrieved from: https://www.epa.gov/superfund/lead-superfund-sites. *See also*, EPA. (2018b). *Flint Drinking Water Response*. Retrieved from: https://www.epa.gov/flint.

[12] EPA. (2018c). *Basic Information about Lead in Drinking Water*. https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water.

[13] Lin, C.G., Schaider, L.A., Brabander, D.J., & Woolf A.D. (2010). Pediatric Lead Exposure from Imported Indian Spices and Cultural Powders. *Environmental Health Perspectives*, 125(4), e828-835. Retrieved from: https://pediatrics.aappublications.org/content/125/4/e828.

[14] Shah, M.P., Shendell, D.G., Ohman-Strickland, P., Bogden, J.D., Kemp, F.W., & Halperin, W. (2017). Lead Content of Sindoor, a Hindu Religious Powder and Cosmetic: New Jersey and India, 2014-2015. *American Journal of Public Health*, 107(10), 1630-1632. https://doi.org/10.2105/AJPH.2017.303931.

[15] President's Task Force on Environmental Health Risks and Safety Risks to Children (Task Force). (2016). *Key Federal Programs to Reduce Childhood Lead Exposure and Eliminate Associated Health Impacts*. Retrieved from: https://ptfceh.niehs.nih.gov/features/assets/files/key_federal_programs_to_reduce_childhood_lead_exposures_and_eliminate_associated_health_impactspresidents_508.pdf.

Activities conducted under the Program will be aligned with the objectives of the *Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts* (Lead Action Plan),[7] focusing particularly on Goal 1 (Reduce Children's Exposure to Lead Sources). For more information, please see http://www.epa.gov/lead.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in the Marketplace in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, EPA will continue implementing those elements of the Lead Action Plan that are supported through this Program. As in prior years, a key priority will be training and certification of firms and individuals performing lead-based paint abatement and RRP activities, including accreditation of training providers. Certified firms are required to apply for recertification every five years in order to maintain their certified status. The rate of firm recertifications under the RRP Program has averaged 23 percent since FY 2017, while the total number of new firms seeking certification has remained steady from quarter to quarter. As outlined in the FY 2020-2021 Agency Priority Goal Lead Action Plan, by September 30, 2021, EPA will increase the recertification rate of lead-based paint RRP firms to 28 percent from a baseline of 23 percent. EPA will strive to increase the recertification rate and will continue to publish an updated list of certified renovation firms on the Agency's website.[8]

Other forms of lead exposure will continue to be addressed through other targeted programs that offer enhanced flexibility, such as lead pipe replacement, multi-media toxics reduction work under the Multipurpose Grants Program, and other multi-faceted toxics reduction work under the Healthy Schools Grant Program.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$4,049.0) This program change reduces lead grants by leveraging resources and expertise from other programs through coordinated implementation of the Lead Action Plan.

Statutory Authority:

Toxic Substances Control Act (TSCA) §§ 401-412.

[7] For more information, please visit: https://www.epa.gov/sites/production/files/2018-12/documents/fedactionplan_lead_final.pdf. *See*, page 8.
[8] For additional information, please visit: https://cfpub.epa.gov/flpp/pub/index.cfm?do=main.firmSearch.

Categorical Grant: Multipurpose Grants

Program Area: Categorical Grants
Goal: More Effective Partnerships
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$0.0***	***$13,000.0***	***$10,000.0***	***-$3,000.0***
Total Budget Authority	$0.0	$13,000.0	$10,000.0	-$3,000.0

Program Project Description:

EPA and its partners have made enormous progress in protecting air, water, and land resources. The recently created Multipurpose Grants Program differs from prior iterations by supporting states, tribes, and territories in the implementation of mandatory statutory duties in environmental programs delegated by EPA. Recognizing that environmental challenges differ due to variations in geography, population density, and other factors, the Program provides EPA's partners with flexibility to target funds to their highest priority efforts to protect human health and the environment.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, these funds will support the implementation of environmental programs delegated by EPA under pertinent environmental laws. States, tribes, 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 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$3,000.0) EPA will work with states, tribes, and territories to target funds to core requirements while providing flexibility to target funds to their highest priorities.

Statutory Authority:

Appropriation Act: FY 2018 (Public Law 115-141); 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, and Compensation and Liability Act (CERCLA); Marine Protection Research and Sanctuaries Act (MPRSA); Indoor Radon Abatement Act.

Note: EPA is currently seeking appropriations language to support this program: "Provided further; That of the funds otherwise available under the heading State and Tribal Assistance Grants; $10,000,000 shall be for multi-purpose grants for the implementation of mandatory statutory duties in delegated environmental programs."

Categorical Grant: Nonpoint Source (Sec. 319)

Program Area: Categorical Grants
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$166,360.0***	***$172,348.0***	***$0.0***	***-$172,348.0***
Total Budget Authority	$166,360.0	$172,348.0	$0.0	-$172,348.0

Program Project Description:

Section 319 of the Clean Water Act (CWA) authorizes states, territories, and tribes to use a range of tools to implement their nonpoint source programs.[16] Grants under Section 319 are provided to states, territories, and tribes to help them implement their EPA approved nonpoint source management programs.

FY 2021 Activities and Performance Plan:

Resources for this program are proposed for elimination in FY 2021. The Agency will continue to coordinate with the United States Department of Agriculture (USDA) on targeting funding where appropriate to address nonpoint sources.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$172,348.0) This funding change proposes to eliminate the Nonpoint Source Grant Program. There are other sources of funding that support this type of work across government and the Agency will partner with USDA to target efforts where appropriate.

Statutory Authority:

CWA § 319.

[16] For more information, see: https://www.cfda.gov.

Categorical Grant: Nutrients and Harmful Algal Blooms Reduction Grants

Program Area: Categorical Grants
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$0.0***	***$0.0***	***$15,000.0***	***$15,000.0***
Total Budget Authority	$0.0	$0.0	$15,000.0	$15,000.0

Program Project Description:

Harmful algal blooms (HABs), which can be caused by nutrient pollution, remain a widespread water quality challenge across the country despite decades of effort to achieve reductions. The sources and impacts of nutrient pollution vary depending on geographic location, and span urban, rural, and coastal landscapes.

The FY 2021 request of $15 million will establish a competitive grant program to fund prevention and response efforts for HABs with significant health or economic risks. Funded projects should further the implementation of HAB-specific state nutrient reduction strategies and programs and should include one or more of the following strategic outputs and outcomes: prioritization of high-impact watersheds; goal setting to support targeting and tracking of implementation efforts; identification and adoption of state-level actions and programs to better prevent and respond to HABs; deployment of staff to plan, prioritize, engage partners and stakeholders in priority watersheds, and manage progress tracking mechanisms; assessment of progress; and reporting and communicating of state progress to the public. State workplans also could support other priority actions identified in a harmful algal bloom strategy or program, including developing or implementing a trading program; modeling and monitoring harmful algal blooms; and watershed planning support.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. The FY 2021 request establishes this grant program. EPA plans to issue the grant awards for this new program beginning in FY 2021. In addition, under the provisions of the Harmful Algal Bloom and Hypoxia Research and Control Act of 2017, EPA would be able to declare if a freshwater HAB or hypoxia event is of national significance and assist the states and tribes with assessing and mitigating the detrimental environmental, economic, subsistence use, and public health effects of the event of national significance.

Performance Measure Targets:

(PM SWP-02) Watersheds with surface waters not meeting standards because of nutrients (square miles).

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target								192,096	Square Miles
Actual									

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$15,000.0) This funding establishes a new competitive grant program to fund prevention and response efforts for HABs with significant health or economic risks and supports the nutrient and HAB reductions focus area.

Statutory Authority:

Clean Water Act, Harmful Algal Bloom and Hypoxia Research and Control Act of 2017.

Categorical Grant: Pesticides Enforcement

Program Area: Categorical Grants
Goal: More Effective Partnerships
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$17,510.6***	***$24,000.0***	***$10,531.0***	***-$13,469.0***
Total Budget Authority	$17,510.6	$24,000.0	$10,531.0	-$13,469.0

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[17] with states and tribes.

The cooperative agreements support state and tribal compliance and enforcement activities under FIFRA. 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[18] 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, EPA will prioritize and award state and tribal pesticides cooperative agreements for implementing the compliance monitoring and enforcement provisions of FIFRA within our resource levels.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

[17] For additional information, please refer to: http://www2.epa.gov/compliance/federal-insecticide-fungicide-and-rodenticide-act-state-and-tribal-assistance-grant.
[18] For additional information, please refer to: http://www2.epa.gov/pesticide-advisory-committees-and-regulatory-partners/tribal-pesticide-programs.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$13,469.0) This change reflects efforts to work with states and tribes to target funds to core requirements while providing flexibility to address particular priorities.

Statutory Authority:

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) §23(a)(1); Further Consolidated Appropriations Act, 2020, Pub. L. 116-94.

Categorical Grant: Pesticides Program Implementation

Program Area: Categorical Grants
Goal: A Cleaner, Healthier Environment
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$12,435.4***	***$12,287.0***	***$8,457.0***	***-$3,830.0***
Total Budget Authority	$12,435.4	$12,287.0	$8,457.0	-$3,830.0

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 and tribes. Grant resources allow states and tribes to be more effective regulatory partners.

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 the use of pesticides.[19] The Agency provides grants to 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 programs. This program focuses on issues such as worker safety activities (including worker protection and certification and training of pesticide applicators), protection of endangered species,[20] protection of water resources from pesticides, protection of pollinators, and promotion of environmental stewardship and Integrated Pest Management related activities.

EPA supports implementation of tribal pesticide programs through cooperative agreements contributing to tribal capacity to protect human health by reducing risks from pesticides in Indian Country. The Program is implemented in a manner that recognizes that certain aspects of Native Americans' 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.[21]

[19] 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.
[20] 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 internet site: http://www.fws.gov/endangered/laws-policies/section-7.html.
[21] For additional information, please visit: http://www.epa.gov/pesticide-advisory-committees-and-regulatory-partners/tribal-pesticide-programs.

The Agency also funds a multiyear grant in support of the State Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Issues Research and Evaluation Group. The grant ensures the close coordination of states and EPA on pesticide issues.

FY 2021 Activities and Performance Plan:

Work in this program supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in the Marketplace in the *FY 2018 – 2022 EPA Strategic Plan*.

Worker Protection Standard and Certification and Training Program

Through the Certification and Training Program and the Worker Protection Standard, EPA protects workers, pesticide applicators and handlers, employers, and the public from the potential risks posed by pesticides in their work environments. In FY 2021, EPA will continue to provide assistance and grants to implement the Certification and Training Program and Worker Protection Standard, and to address changes to the federal regulations for these programs. In FY 2021, states, territories, and tribes (certifying authorities) will have submitted their revised Certification and Training plans to address the new regulations. EPA will work with these certifying authorities to refine and modify their revised plans as needed. EPA must approve plans by March 4, 2022. Certifying authorities may need to begin regulatory and program changes in FY2021 to comply with the 2017 final rule. For worker protection, the states, territories, and tribes will continue to train their program and inspection staff on the 2017 final revisions to the Worker Protection Standard, conduct outreach and compliance assistance, and enforce the rule.[22]

Endangered Species Protection Program

The Endangered Species Protection Program protects federally listed, threatened, or endangered animals and plants whose populations are threatened by risks associated with pesticide use.[23] EPA complies with Endangered Species Act requirements to ensure that its regulatory decisions likely will not jeopardize the continued existence of species listed as endangered and threatened, or destroy or adversely modify habitat designated as critical to those species' survival. EPA will provide grants to states and tribes, as described above, for projects supporting endangered species protection. Program implementation includes outreach, communication, education related to use limitations, review and distribution of endangered species protection bulletins, and mapping and development of endangered species protection plans. In FY 2021, these activities will continue to support the Agency's mission to protect the environment from pesticide risk.

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 2021, EPA will provide funding, through cooperative agreements, to states, tribes, and other partners to investigate and respond, as needed, to address water resources contaminated by pesticides. Stakeholders and partners, including states and tribes, are expected to evaluate local pesticide uses that have the potential to

[22] For additional information, please visit: https://www.epa.gov/pesticide-worker-safety/how-epa-protects-workers-pesticide-risk.
[23] For additional information, please visit: http://www.epa.gov/oppfead1/endanger/species-info.htm.

contaminate water resources and take steps to prevent or reduce contamination where pesticide concentrations approach or exceed levels of concern.

Integrated Pest Management

In FY 2021, EPA will continue to support risk reduction by providing assistance to promote the use of safer alternatives to traditional chemical pest control methods including Integrated Pest Management techniques.[24] EPA supports the development and evaluation of new pest management technologies that contribute to reducing both health and environmental risks from pesticide use.

Pollinator Health

In FY 2021, EPA will continue to work with state and tribal agencies to promote the development of locally-based 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 honey bees, while maintaining the flexibility needed by growers. 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 overall goal of mitigating exposure of bees to acutely toxic pesticides.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$3,830.0) This program change will streamline core activities, leverage efficiencies, and available resources. EPA will work with states and tribes to target funds to core requirements while providing flexibility to address particular priorities.

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).

[24] For additional information, please visit: http://www.epa.gov/pesp/.

Categorical Grant: Pollution Control (Sec. 106)

Program Area: Categorical Grants
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$225,454.2***	***$223,289.0***	***$153,683.0***	***-$69,606.0***
Total Budget Authority	$225,454.2	$223,289.0	$153,683.0	-$69,606.0

Program Project Description:

Section 106 of the Clean Water Act (CWA) authorizes EPA to provide federal assistance to states (including territories and the District of Columbia), tribes qualified under CWA Section 518(e), and interstate agencies to establish and maintain adequate programs for the prevention and control of surface and groundwater pollution from point and nonpoint sources. Prevention and control activities supported through these grants include: providing National Pollutant Discharge Elimination System (NPDES) permits; 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. The CWA Section 106 Grant Program supports prevention and control measures that improve water quality. In FY 2021, EPA will focus on core statutory requirements while continuing to provide states and tribes with flexibility to best address their specific priorities.

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 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 2021, EPA will continue working with states and tribes to support their water quality monitoring programs. Monitoring Initiative funds for states and tribes will support the National Aquatic Resource Surveys (NARS) and the enhancement of state and tribal monitoring programs.[25] In FY 2021, the Monitoring Initiative will be funded at $11.9 million for participation in the NARS and for monitoring program priority enhancements. EPA is implementing

[25] For more information, please see: https://www.epa.gov/water-pollution-control-section-106-grants/monitoring-initiative-grants-under-section-106-clean.

recommendations from a Lean Management exercise to improve the timeliness of monitoring data processed for NARS partnerships.

Through the Monitoring and Assessment Partnership, EPA will continue working with states to develop and apply innovative and efficient monitoring tools and techniques to optimize availability of high-quality data to support priority CWA program needs. In FY 2021, 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. In FY 2019, EPA supported states to reduce outstanding state 303(d) lists from 50 to 30 lists. Timeliness of EPA review also has improved with EPA reducing the backlog of EPA action on state-submitted 303(d) lists from highs of 25 in FY 2018 and 13 in FY 2019 to 2 total in FY 2019. From FY 2017 to FY 2019, EPA has supported and acted on more than 80 lists of impaired waters submitted by states under CWA Section 303(d); these lists help inform progress on restoring water quality. 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 Assessment Total Maximum Daily Load Tracking and Implementation System (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 the CWA and EPA regulations in 40 CFR part 131. EPA also 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 as they complete triennial reviews of applicable standards on time as required by the 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 restoration goals. TMDLs focus on achieving clearly defined environmental standards and establishing a pollutant budget, which is then implemented via permit requirements and through local, state, and federal watershed plans and programs to restore waters. EPA will continue to work with states to 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. As of the end of FY 2019, 48,544 square miles, or 51.2 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 700+ in FY 2018 to 22 in FY 2019. Between fiscal years 2017 and 2019, the EPA has supported and approved more than 6,000 TMDLs.

Issuing Permits

The NPDES Program requires point source dischargers of pollutants to waters of the U.S. 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. Through the Lean Management System, EPA is working with the states[26] to: balance competing opportunities; identify opportunities to enhance the integrity and effectiveness of NPDES permits; set schedules to address significant action items; and fine-tune permitting implementation and oversight practices. After program improvements, between March 2018 and December 2019, the backlog of EPA-issued new and existing NPDES permits decreased from 106 to 26 and 547 to 373, respectively.

Conducting Compliance Monitoring and Enforcement

EPA will work with NPDES-authorized states to implement the 2014 CWA NPDES Compliance Monitoring Strategy (CMS).[27] The NPDES CMS establishes national standards for allocation of inspection resources across all NPDES regulated entities in order to best protect water quality.

EPA works with states on advanced technologies, such as remote water monitoring sensors to collect discharge data, to more efficiently identify problem areas. 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.

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. For example, currently over 34,000 NPDES permittees in 23 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 2021 to ensure a smooth transition to electronic reporting for the NPDES program. Implementing the NPDES eRule will help EPA and states clean up the Nation's waters by: saving time and resources for the states and regulated community improving transparency; and obtaining more accurate, timely, complete, and consistent information about the NPDES program.

Working with Tribal Water Pollution Control Programs

In FY 2021, EPA will work with tribal programs on activities that address water quality and pollution problems on tribal lands. Tribes will continue to implement and expand their water pollution control programs pursuant to CWA Section 518(e).

[26] Currently no tribes have authority to implement the NPDES program.
[27] For more information, please see: https://www.epa.gov/compliance/clean-water-act-national-pollutant-discharge-elimination-system-compliance-monitoring.

Performance Measure Targets:

(PM SWP-01) Watersheds with surface water not meeting standards (cumulative).

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					No Target Estab-lished	497,728	564,536	555,536	Square Miles
Actual					N/A	493,930			

(PM SWP-02) Watersheds with surface waters not meeting standards because of nutrients (square miles).

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target								192,096	Square Miles
Actual									

(PM TMDL-02) Percentage of priority TMDLs, alternative restoration plans, and protection approaches in place.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target						50	67	84	Percent
Actual			9	14	33.3	51.2			
Numerator			8,822	14,045	33,194	48,544			Square Miles
Denominator			101,141	99,424	99,415	94,806			

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$69,606.0) This program change is a decrease for the CWA Section 106 Grant Program. EPA will work with states and tribes to target funds to core requirements while providing flexibility to address priorities.

Statutory Authority:

CWA § 106.

Categorical Grant: Pollution Prevention

Program Area: Categorical Grants
Goal: More Effective Partnerships
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$5,545.5***	***$4,610.0***	***$0.0***	***-$4,610.0***
Total Budget Authority	$5,545.5	$4,610.0	$0.0	-$4,610.0

Program Project Description:

The Pollution Prevention (P2) Categorical Grants Program augments the counterpart P2 Program under the Environmental Programs and Management (EPM) account.

FY 2021 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2021. Based on previous investments in P2 solutions made under this program project, partners are expected to be able to continue to share best practices and pursue additional pollution prevention solutions.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$4,610.0) This funding change proposes to eliminate the Categorical Grant: Pollution Prevention.

Statutory Authority:

Pollution Prevention Act of 1990 (PPA) § 6605; Further Consolidated Appropriations Act, 2020, Pub. L. 116-94.

Categorical Grant: Public Water System Supervision (PWSS)

Program Area: Categorical Grants
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$96,689.7***	***$106,250.0***	***$67,892.0***	***-$38,358.0***
Total Budget Authority	$96,689.7	$106,250.0	$67,892.0	-$38,358.0

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 (NPDWR) 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 adverse health risks.

PWSS Program grants support the safety of the Nation's drinking water resources and protect public health and the environment. 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., on-site reviews conducted to determine and support a facility'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.

Funds allocated to states and tribes without primacy are used to support direct implementation activities by EPA.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, EPA will work with states and tribes to target funds to core statutory requirements while providing primacy agencies with flexibility to best address their priorities. EPA will provide funds to support state efforts to assist the most vulnerable water

systems in meeting drinking water regulations and in developing the financial and managerial capacity needed to protect federal investments that remedy aging or inadequate infrastructure (e.g., pipe replacement to prevent failures in distribution systems, installation of treatment to remove drinking water contaminants).

EPA's PWSS Program is working with states to pursue a reduction of the number of systems that have health-based non-compliance events. This includes working to decrease the number of community water systems out of compliance with health-based standards. Over the five-year period of the *FY 2018- 2022 EPA Strategic Plan*, EPA is pursuing a 23 percent reduction in the number of systems that have health-based violations from 3,508 in FY 2017 to 2,700 by FY 2022. As of Fall 2019, approximately 1,982 of the 3,508 systems with health-based violations 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, developing best practices, strengthening state capacity, and certifying drinking water operators.

EPA also is enhancing its oversight of the state drinking water programs by completing the annual PWSS program review for each primacy agency as required under SDWA. Information gained during these reviews includes an analysis of the completion of sanitary surveys by the primacy agency as required by the state and an evaluation of whether the primacy agency is implementing the state program in accordance with SDWA. The annual program review directly supports the work of the states and the Agency to meet the Agency's long-term performance goal and annual performance goal to reduce community water systems out of compliance with health-based standards.

Performance Measure Targets:

(PM DW-01) Community water systems out of compliance with health-based standards.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					3,510	3,380	3,280	3,060	CWSs
Actual	4,682	5,050	4,817	3,508	3,480	3,547			

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$38,358.0) This program change is a reduction for the PWSS Program. EPA will work with states and tribes to target funds to core statutory requirements while providing flexibility to address priorities.

Statutory Authority:

SDWA § 1443.

Categorical Grant: Radon

Program Area: Categorical Grants
Goal: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$7,453.4***	***$7,789.0***	***$0.0***	***-$7,789.0***
Total Budget Authority	$7,453.4	$7,789.0	$0.0	-$7,789.0

Program Project Description:

Title III of the Toxic Substances Control Act (TSCA) authorizes EPA to undertake a variety of activities to address the public health risks posed by exposures to indoor radon. Under the statute, EPA has assisted states and tribes through technical support and the State Indoor Radon Grants program, which provided categorical grants to develop, implement, and enhance programs that assess and mitigate radon risk. For over 30 years, EPA's radon program has provided important guidance, technical assistance, and funding to help states establish their own programs. EPA also provided technical support to transfer "best practices" among states that promote effective program implementation across the Nation.

FY 2021 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2021.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$7,789.0) This funding change proposes to eliminate the Radon program in the STAG account.

Statutory Authority:

Toxic Substances Control Act (TSCA) § 306; Clean Air Act (CAA); Radon Gas and Indoor Air Quality Research Act; Title IV of the Superfund Amendments and Reauthorization Act (SARA).

Categorical Grant: State and Local Air Quality Management

Program Area: Categorical Grants
Goal: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$219,874.2***	***$228,219.0***	***$151,961.0***	***-$76,258.0***
Total Budget Authority	$219,874.2	$228,219.0	$151,961.0	-$76,258.0

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 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 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: development and implementation of preconstruction permit programs; emission reduction measures; development and operation of air quality monitoring networks, and other air program activities, including training. 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 EPA Strategic Plan*. This program also supports the FY 2020 – 2021 Agency Priority Goal, "Improve air quality by reducing the number of areas not meeting air quality standards," and the long-term performance goal, "By September 30, 2022, reduce the number of nonattainment areas to 101."[28]

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. Affected states will be completing development or revision of attainment SIPs for areas classified "Moderate" or higher for the 2015 ozone NAAQS and reclassified to "Serious" for the 2008 ozone NAAQS and areas designated nonattainment effective April 2018 for the 2010 sulfur dioxide (SO_2) NAAQS. States also have SIP obligations associated with visibility improvement requirements, among other requirements identified in the CAA. States

[28] The baseline is 166 nonattainment areas as of October 1, 2017.

also will continue implementing the 2008 8-hour ozone NAAQS, the 2008 lead NAAQS, the 2010 1-hour nitrogen dioxide (NO_2) NAAQS, and the 2010 1-hour SO_2 NAAQS.

As appropriate, 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, and the 1-hour and 1997 8-hour ozone NAAQS (through anti-backsliding requirements). EPA, in close collaboration with states and tribes, will work to reduce the number of areas in nonattainment with the NAAQS. In FY 2021, 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. 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.

Air Monitoring Networks. States will operate and maintain their air monitoring networks[29] to the extent possible, balancing competing priorities. The largest part of a state's overall air program includes the collection, analysis, quality assurance, and submittal of ambient air quality data.

Air Permitting Programs. In FY 2021, 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 2021, states will continue to develop inventories and submit data to EPA under an adjusted schedule for the next release of the National Emission Inventory (NEI). EPA plans to release the 2017 NEI in calendar year 2020.

Air Quality Forecasts. This program supports state and local air agency capabilities to provide air quality forecasts for ozone and $PM_{2.5}$ that 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. In addition, many communities use forecasts for initiating air quality "action" or "awareness" days. EPA will update data on an adjusted schedule to allow for state and local agencies to provide important public health information to the public.

State and Local Air Toxics Efforts. This 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 2021, funds also will support the National Air Toxics Trends Stations (NATTS), consisting of 24 air toxics monitoring sites and including the associated quality assurance, data analysis, and methods support. Funding may be available to support the community scale air toxics grant competition.

[29] Air Monitoring networks: $PM_{2.5}$, NCore, ozone, SO_2, NO_2, carbon monoxide, lead, and air toxics.

Visibility Improvement. States are required to submit periodic plans demonstrating how they have and will continue to make progress towards achieving their visibility improvement goals required under the Regional Haze Rule. In FY 2021, states will work collaboratively to submit SIPs for the second planning period of the regional haze program under the visibility improvement requirements of the CAA which are due by July 31, 2021. Comprehensive regional haze SIP revisions are due in FY 2021. In addition, states will be implementing control measures required from their first planning period SIPs.

Air Quality Training. In FY 2021, states and multi-jurisdictional organizations will use this funding to establish 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.

EPA also proposes to transition the funding of the $PM_{2.5}$ monitoring network from Section 103 authority of the CAA, which provides 100 percent federal funding, to Section 105 authority of the CAA, which provides a maximum federal share of 60 percent.

Performance Measure Targets:

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

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$76,258.0) This program change is a decrease in federal support for CAA grants to state environmental programs responsible for carrying out air quality implementation activities. EPA will work with states to target funds to core requirements while providing flexibility to address particular state priorities.

Statutory Authority:

Clean Air Act §§ 103, 105, 106.

Categorical Grant: Toxics Substances Compliance

Program Area: Categorical Grants
Goal: More Effective Partnerships
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$4,597.4***	***$4,759.0***	***$3,276.0***	***-$1,483.0***
Total Budget Authority	$4,597.4	$4,759.0	$3,276.0	-$1,483.0

Program Project Description:

The Toxic Substances Control Act (TSCA) Compliance Monitoring Program builds environmental partnerships[30] 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Enhanced Shared Accountability in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, EPA will continue to award state and tribal assistance grants to assist in the implementation of compliance and enforcement provisions of TSCA.

In recent years, the Agency has consulted with its state partners in the development of a new allocation formula for the TSCA State and Tribal Assistance Grants. EPA began implementing the new formula in FY 2019, using a phased approach over three fiscal years (FY 2019 - FY 2021). This approach establishes a new weighted formula that better 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.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

[30] For additional information, please refer to: https://www.epa.gov/compliance/toxic-substances-compliance-monitoring-grant-guidance-fiscal-year-2020.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$1,483.0) This program change reflects a focus on reducing risks from lead-based paint and maximizing environmental benefits and program performance. EPA will work with states and tribes to target funds to core requirements while providing flexibility to address particular priorities.

Statutory Authority:

Toxic Substances Control Act.

Categorical Grant: Tribal Air Quality Management

Program Area: Categorical Grants
Goal: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$12,556.1***	***$12,829.0***	***$8,963.0***	***-$3,866.0***
Total Budget Authority	$12,556.1	$12,829.0	$8,963.0	-$3,866.0

Program Project Description:

This program includes funding for tribal air pollution control agencies and/or tribes implementing projects and programs to address air pollution issues in Indian Country. Using Section 105 authority of the Clean Air Act (CAA), tribal air pollution control agencies and tribes may develop and implement programs for the prevention and control of air pollution and implementation of national primary and secondary National Ambient Air Quality Standards (NAAQS). Using Section 103 authority of the CAA, tribal air pollution control agencies or tribes, 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.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018 – 2022 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. 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 at reduced levels.

Currently, there are 573 federally recognized tribes. Of those, 52 tribes have treatment in a manner similar to a state status or Treatment as a State with regard to implementing functions pertaining to the management and protection of air resources within reservation boundaries or other areas under the tribe's jurisdiction and have the capability to implement the CAA program(s) for which they have received approval. 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 the EPA to carry out CAA protections within reservations and tribal communities.

In FY 2021, 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.

Performance Measure Targets:

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

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$3,866.0) This program change is a decrease in federal support for CAA grants to tribal air pollution control agencies and/or tribes. The EPA will work with tribes to target funds to core requirements while providing flexibility to best address tribal priorities.

Statutory Authority:

Clean Air Act §§ 103, 105.

Categorical Grant: Tribal General Assistance Program

Program Area: Categorical Grants
Goal: More Effective Partnerships
Objective(s): Enhance Shared Accountability

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$67,299.0***	***$65,476.0***	***$44,233.0***	***-$21,243.0***
Total Budget Authority	$67,299.0	$65,476.0	$44,233.0	-$21,243.0

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 the development and implementation of solid and hazardous waste programs for Indian lands, including solid waste service delivery costs.[31] 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 able to participate in environmental decision-making; and
- Establishing tribal program capacity to communicate and coordinate 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 inter-tribal consortia. GAP has helped tribes receive 83 program delegations to administer a variety of programs across a number of 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

[31] The Consolidated Appropriations Act, 2018 (Pub. L. 115 – 141).

through Direct Implementation Tribal Cooperative Agreements (DITCAs). As of FY 2020, there are 17 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 also may have EPA federal inspector credentials. In addition, GAP also supports tribes with the development of their waste management programs with 256 tribes having Integrated Waste Management Plans.

FY 2021 Activities and Performance Plan:

Work in the Program directly supports Goal 2/Objective 2.1, Enhance Shared Accountability, in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, GAP grants will continue to assist tribal governments in developing environmental protection program capacity to assess environmental conditions, use relevant environmental information to improve long-range strategic environmental program development planning, and develop programs tailored to tribal government needs consistent with those long-range strategic plans.

The Agency's *Guidance on the Award and Management of General Assistance Agreements for Tribes and Intertribal Consortia*[32] establishes an overall framework for tribes and EPA to follow in developing tribal environmental program capacity under GAP. Specifically, the guidance strengthens joint strategic planning through development and implementation of EPA-Tribal Environmental Plans (ETEPs) to document intermediate and long-range tribal environmental program development priorities. These tribe-specific strategic planning documents inform funding decisions by linking annual GAP assistance agreement work plans to ETEP goals and provide a mechanism to measure tribal progress in meeting their program development goals. As of September 30, 2019, EPA has completed 470 ETEPs and anticipates completing its 500th ETEP in 2020. EPA will focus on providing assistance to regions and tribal partners in implementing ETEPs, including training and development of a best practices guide, as well as monitoring regional actions to implement ETEPs as part of the business review process.

In FY 2020, EPA will complete an evaluation of the program implementation under the 2013 GAP guidance and anticipates developing revised Guidance for tribal consultation. The evaluation has been comprehensive, involving gathering of evidence from EPA project officers and tribal recipients of GAP funding based on their experience using the current guidance, which has helped inform EPA's understanding of how the program guidance and implementation approaches are contributing to intended results of tribal capacity development related to EPA-administered programs. During the evaluation, EPA has specifically requested input related to using the guidance to develop work plans, connecting GAP funding to tribal environmental program goals, and approaches for national program performance measurement and reporting.

In FY 2021, EPA will continue to implement GAP under a national framework set forth in program guidance, as modified during FY 2020, 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 Tribal Capacity Program),

[32] The GAP Guidance is available at https://www.epa.gov/tribal/2013-guidance-award-and-management-general-assistance-agreements-tribes-and-intertribal.

EPA will continue to establish and refine tools to track the progress tribes achieve toward developing and implementing environmental protection programs in Indian Country.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$21,243.0) This program change reduces funding available for tribes to develop the capacity to implement environmental protection programs in Indian Country. EPA will work with states and tribes to target funds to core requirements while providing flexibility to address priorities.

Statutory Authority:
Indian Environmental General Assistance Program Act.

Categorical Grant: Underground Injection Control (UIC)

Program Area: Categorical Grants
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$9,846.2***	***$10,164.0***	***$6,995.0***	***-$3,169.0***
Total Budget Authority	$9,846.2	$10,164.0	$6,995.0	-$3,169.0

Program Project Description:

EPA's Underground Injection Control (UIC) Grant Program funds federal, state, and tribal government agencies that oversee underground injection activities to prevent contamination of underground sources of drinking water from fluid injection practices, as established by the Safe Drinking Water Act (SDWA).

EPA regulates the 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. EPA will provide grants 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 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. The FY 2021 request will support implementation of the UIC Program, which manages approximately 830,000 injection wells[33] across six well types to protect groundwater resources. EPA directly implements UIC programs in eight states and two territories and shares responsibility in nine states and with two tribes. EPA also administers the UIC programs for all other tribes and for Class VI wells in all states but North Dakota.[34] EPA will continue its support of state oil and gas programs as they implement or assume responsibility for UIC Class II programs.

The UIC Program is improving efficiency by reducing the UIC permit application processing time to 180 days or fewer. The Program will continue implementing the UIC well permit review process developed as part of EPA's Lean Management System. For the UIC Program, this includes

[33] As represented in calendar year 2018 annual inventory.
[34] For more information, please visit: https://www.epa.gov/uic/primary-enforcement-authority-underground-injection-control-program.

applying identified permit review and processing efficiencies from the Class II effort to all other well classes, modifying common definitions, as appropriate, to provide greater clarity for all well classes so that improvements in processing permit applications can be attained. As of October 2019, the backlog of EPA-issued new UIC permits decreased from 36[35] to 25.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$3,169.0) This program change is a reduction for the UIC Grant Program. EPA will work with states and tribes to target funds to core statutory requirements while providing flexibility to address priorities.

Statutory Authority:

SDWA § 1443.

[35] The baseline is from the beginning of FY 2019.

Categorical Grant: Underground Storage Tanks

Program Area: Categorical Grants
Goal: A Cleaner, Healthier Environment
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$1,590.1***	***$1,449.0***	***$0.0***	***-$1,449.0***
Total Budget Authority	$1,590.1	$1,449.0	$0.0	-$1,449.0

Program Project Description:

Releases of petroleum from underground storage tanks (UST) can contaminate groundwater, the drinking water source for many Americans. The UST Grant Program provides funding to states[36] to bring UST systems into compliance with release prevention and release detection requirements.

STAG funds are used by states to fund such activities as: seeking state program approval to operate the UST Program in lieu of the federal program; approving specific technologies to detect leaks from tanks; ensuring that tank owners and operators are complying with notification and other requirements; ensuring equipment compatibility; conducting inspections; and implementing operator training.

FY 2021 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2021. States could elect to maintain core program work with state resources rather than federal resources.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$1,449.0) This funding change proposes to eliminate the Categorical Grant: Underground Storage Tanks Program.

Statutory Authority:

Solid Waste Disposal Act § 2007(f); Further Consolidated Appropriations Act, 2020, Pub. L. 116-94.

[36] 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.

Categorical Grant: Wetlands Program Development

Program Area: Categorical Grants
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$12,772.7***	***$14,183.0***	***$9,762.0***	***-$4,421.0***
Total Budget Authority	$12,772.7	$14,183.0	$9,762.0	-$4,421.0

Program Project Description:

The Wetlands Program Development Grants Program assists states, tribes, and local governments with building or enhancing their wetland protection and restoration programs. 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;[37] and 4) wetland water quality standards.

States and tribes develop program elements based on their goals and resources. The grants support development of state and tribal wetland programs that further the goals of the 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 the 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.[38] In addition, EPA sets aside 10 percent of the appropriation for a grant competition specifically for tribes and inter-tribal consortia.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, 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 hazards; and developing regulatory controls to avoid, minimize, and compensate

[37] State and Tribal assumption of 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 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.

[38] For more information, please see: http://water.epa.gov/grants_funding/wetlands/estp.cfm.

for wetland impacts. EPA also will work with interested states and tribes to develop and improve their wetland program capacity.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$4,421.0) This program change is a reduction for the Wetland Program Development Grants Program. EPA will work with states and tribes to target funds to core requirements while providing flexibility to address priorities.

Statutory Authority:

CWA § 104(b)(3).

State and Tribal Assistance Grants (STAG)

Diesel Emissions Reduction Grant Program
Program Area: State and Tribal Assistance Grants (STAG)
Goal: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$99,701.8***	***$87,000.0***	***$10,000.0***	***-$77,000.0***
Total Budget Authority	$99,701.8	$87,000.0	$10,000.0	-$77,000.0

Program Project Description:

The Diesel Emissions Reduction Act (DERA) Grant Program provides support for emission reductions from existing diesel engines through engine retrofits, rebuilds, and replacements; switching to cleaner fuels; idling reduction; and other clean diesel 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.

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 in 2007 and 2008 respectively, new cleaner diesel engines started to enter the Nation's fleet. However, there are nearly10 million older engines in use that will continue to emit large amounts of nitrogen oxides and particulate matter. EPA's DERA program promotes strategies to reduce these emissions and protect public health by working with manufacturers, fleet operators, air quality professionals, environmental and community organizations, tribes, and state and local officials. While the DERA grants accelerate the pace at which dirty engines are retired or retrofitted, pollution emissions from the legacy fleet also will be reduced over time as portions of the fleet are replaced with new engines that meet modern emission standards. However, even with attrition through fleet turnover, the Agency estimates that more than one million old diesel engines will remain in use in 2030.[39]

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Improve Air Quality in the *FY 2018–2022 EPA Strategic Plan*. In FY 2021, EPA will continue to target its discretionary funding to direct DERA grants and rebates to reduce diesel emissions in priority areas and areas of highly concentrated diesel pollution with a primary focus on ports and school buses.

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

Tens of millions of people in the U.S. currently live and work close to ports.[40] These people can be exposed to air pollution associated with emissions from diesel engines at ports including particulate matter, nitrogen oxides, ozone, and air toxics, which can contribute to significant health problems, including premature mortality, increased hospital admissions for heart and lung disease, increased cancer risk, and increased respiratory symptoms, especially for children, the elderly, outdoor workers, and other sensitive populations.[41] School buses provide the safest transportation to and from school for more than 25 million American children every school day. However, diesel exhaust from these buses has a negative impact on human health, especially for children, whose lungs are not yet fully developed and who have a faster breathing rate than adults.[42]

Using the formula outlined in the Energy Policy Act of 2005, eligible states and territories receive 30 percent of the annual DERA appropriation for the establishment of clean diesel grant, rebate, and loan programs. The remaining DERA funding is split into two categories. The first category allocates funds to a rebate program that was first established under DERA's 2010 reauthorization. Through the rebate mechanism, the Agency will more efficiently and precisely target the awards toward improving children's health and turning over the Nation's school bus fleet. In addition, this rebate mechanism can be used to provide funding directly to private fleets. The second category allocates funds toward national grants focusing on areas with poor air quality, especially those impacted most severely by ports and goods movement. EPA also will continue to track, assess, and report the results of DERA grants, such as numbers of engines, emissions benefits, and cost-benefit information.[43] Further, EPA will continue to provide diesel emission reduction technology verification and evaluation and provide that information to the public.[44]

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$77,000.0) This program change is a reduction in the overall amount of DERA grant funding available for grants and rebates to reduce diesel emissions while continuing to target priority areas such as clean school bus retrofits and rebates.

[40] 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.
[41] For more information, please see EPA's National Port Strategy Assessment Report of 2016, found at: https://www.epa.gov/ports-initiative/national-port-strategy-assessment.
[42] For more information, please visit: https://www.epa.gov/cleandiesel/clean-school-bus.
[43] List of all grant awards under DERA can be found at https://www.epa.gov/cleandiesel/clean-diesel-national-grants.
[44] For more information, please visit: https://www.epa.gov/cleandiesel.

Statutory Authority:

Diesel Emissions Reduction Act; Energy Policy Act of 2005, Title VII, Subtitle G, as amended and reauthorized by the Diesel Emissions Reduction Act of 2010 (Public Law 111-364) and subsequent appropriations acts and codified at 42 USC 16131, *et seq*.

Brownfields Projects
Program Area: State and Tribal Assistance Grants (STAG)
Goal: A Cleaner, Healthier Environment
Objective(s): Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$91,319.3***	***$89,000.0***	***$80,000.0***	***-$9,000.0***
Total Budget Authority	$91,319.3	$89,000.0	$80,000.0	-$9,000.0

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. Approximately 129 million people (roughly 40 percent of the U.S. population) live within three miles of a brownfields site that received EPA funding.[45] This idle land drags down property values and can slow down a local economy. Brownfields redevelopment is a key to revitalizing main streets, neighborhoods, and rural communities; increasing property values and creating jobs. Since its inception, the Brownfields Program has fostered a community-driven approach to the reuse of contaminated sites. As of January 2020, grants awarded by the Program have led to over 88,900 acres of idle land made ready for productive use and over 156,500 jobs and $29.5 billion leveraged.[46] By awarding brownfields grants, EPA makes investments in communities so 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 and environmental workforce development and job training cooperative agreements.

A 2017 study found that housing property values increased 5 to 15.2 percent near brownfield sites when cleanup was completed.[47] 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 2 to 7 times more than the $12.4 million EPA contributed to the cleanup of those brownfields.[48] In addition, based on historical data provided by the Assessment

[45] U.S. EPA, Office of Land and Emergency Management Estimate 2017. Data collected includes: (1) site information as of the end of FY 2016; and (2) census data from the 2011-2015 American Community Survey.
[46] EPA's ACRES database.
[47] 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.
[48] Sullivan, K. A. 2017. Brownfields Remediation: Impact on Local Residential Property Tax Revenue. *Journal of Environmental Assessment Policy and Management, 19(3),* http://dx.doi.org/10.1142/S1464333217500132.

Cleanup and Redevelopment Exchange System (ACRES) database, $1 of EPA's Brownfields funding leverages between $16 and $17 in other public and private funding.[49]

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination, in the *FY 2018 – 2022 EPA Strategic Plan*. For example, EPA made 910 additional brownfields sites ready for anticipated use in FY 2019, exceeding FY 2018-2019 Agency Priority Goal by over 400 sites for a total of 1,771 sites. In FY 2021, EPA 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 Opportunity Zones. The activities described below will leverage approximately 7,100 jobs and $1.2 billion in other funding sources.[50]

- Funding will support at least 87 assessment cooperative agreements that recipients may use to inventory, assess, and conduct cleanup and reuse planning at brownfields sites. Approximately 520 site assessments will be completed under these agreements.

- EPA will provide funding for TBAs in up to 60 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 and rural communities to submit 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 26 direct cleanup cooperative agreements to enable eligible entities to clean up recipient owned properties.

- Funding will support 10 multipurpose cooperative agreements, authorized under the Brownfields Utilization, Investment and Local Development (BUILD) Act that was passed in March 2018. Under this cooperative agreement, recipients may conduct assessments and cleanup at multiple sites, as well as planning activities at the targeted sites under one award.

- The Agency will provide supplemental funding to approximately 13 existing high performing Revolving Loan Fund (RLF) recipients. These awards will lead to approximately 25 additional sites cleaned up.

- Funding will support 15 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. The request will lead to approximately 735 people trained and 510 placed in jobs.

[49] For more information, please visit www.epa.gov/brownfields.
[50] 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.

- Funding also will support assessment and cleanup of abandoned underground storage tanks and other petroleum contamination found on brownfields properties for up to 30 brownfields assessment cooperative agreements and two cleanup cooperative agreements, as authorized under CERCLA 104(k)(2) and (3).

- 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 CERCLA 104(k)(7).

- Funding will be provided for technical assistance to an estimated 50 small and disadvantaged communities as defined in the recently passed BUILD Act and as authorized in Section 128(a)(B)(III).

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 2021.

Performance Measure Targets:

(PM B30) Number of brownfields sites made ready for anticipated use.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target	550	550	600	600	684	684	684	684	Sites
Actual	639	668	547	531	861	910			

(PM B37) Billions of dollars of cleanup and redevelopment funds leveraged at brownfields sites.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target	1.2	1.1	1.1	1.1	1.1	1.3	1.3	1.3	Billions of Dollars
Actual	1.54	1.71	1.47	1.7	2.2	2.3			

Work under this program supports performance results in the Integrated Environmental Strategies Program under the EPM appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$18,000.0) This program change supports EPA's Opportunity Zones focus area by providing a set-aside for projects located in Qualified Opportunity Zones, to the extent there are sufficient qualified applications. The Budget proposes appropriation language to create this set-aside.

- (-$27,000.0) This program change reflects a focus on assessment and direct cleanup grants, while reducing other program activities.

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: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$24,469.5***	***$29,186.0***	***$3,000.0***	***-$26,186.0***
Total Budget Authority	$24,469.5	$29,186.0	$3,000.0	-$26,186.0

Program Project Description:

The Alaska Rural and Native Village (ANV) Program reduces disease and health care costs by providing critical basic drinking water and sanitation infrastructure (*i.e.*, flushing toilets and running water) in vulnerable rural and Native Alaskan communities that lack such services disproportionately when compared to the rest of the country. Alaskan rural and native water and sewer systems face not only the typical challenges associated with small system size, but also the challenging climactic and geographic conditions, such as permafrost, shortened construction seasons, and extremely remote locations.

ANV communities look to EPA as a last-resort funding source 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 results from the Indian Health Service's (IHS) November 2019 analysis exemplify the need to assist these communities – the IHS identified $223 million of need for water and wastewater infrastructure in Alaska in FY 2019.[51] Many communities on the prioritized list have not been able to advance their projects due to lack of funding.

EPA's grant to the State of Alaska funds improvements and construction of drinking water and wastewater treatment facilities for these small and disadvantaged communities. Investments in wastewater and drinking water infrastructure in rural Alaskan communities contributed to an increase of access to water and sewer service from 60 percent in the late 1990s to 97.2 percent in 2019.[52] While the gains in the Program have been significant, ANV communities continue to trail behind the non-tribal/non-native population in the U.S. with access to water and sanitation. In Alaska, approximately 3 percent of native and rural serviceable households[1] are without complete indoor plumbing, a much higher figure than the national average of 0.4 percent[53] of occupied homes that lack complete indoor plumbing.

[51] IHS data from November 2019 indicates a $223 million water and sewer need in Alaska. The 2018 IHS Annual Sanitation Deficiency Report to Congress https://www.ihs.gov/sites/newsroom/themes/responsive2017/display_objects/documents/Report_To_Congress_FY18_SanitationFacilitiesDeficiencies.pdf.
[52] Based on data from the Indian Health Service (IHS) and the State of Alaska (2019).
[53] See, U.S. Census Survey, 2012.

In addition to funding system upgrades and construction to address the aforementioned challenges Alaskans face, the ANV Program also uniquely supports training, technical assistance, and educational Programs to improve the financial management and operation and maintenance of sanitation systems. This is done through leveraging prioritization and implementation expertise from the State of Alaska[54] with ANV Program funds.

The ANV technical assistance Program helps to improve the long-term sustainability of the rural water utilities, creating transferable job skills in construction and operation and maintenance activities. The Program also has helped to nearly double the number of properly certified drinking water treatment plant operators in Alaskan rural villages since FY 1992, and the number of non-compliant systems has decreased by close to 80 percent since FY 2006.[55] Since 2005, the Program, in collaboration and combination with other federal agencies, has shown significant progress documenting the number of projects and ANV homes with increased access to safe water and sanitation. Over this period, the ANV Program contributed about 35 percent[56] of all funding provided from federal agencies.

FY 2021 Activities and Performance Plan:

Work in this Program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. The FY 2021 request of $3 million will provide water and wastewater services for additional homes and maintain the existing level of wastewater and drinking water infrastructure that meets public health standards. Based on data from the past three years of funding to the ANV Program, it is expected that $3 million in ANV funds in FY 2021 would improve the drinking water and/or wastewater services to about 350 homes in rural Alaska and continue to support training, technical assistance, and educational Programs that protect existing federal investments in infrastructure by improving operation and maintenance of the systems.

In FY 2021, 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.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this Program.

[54] 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.
[55] As reported by the State of Alaska Department of Environmental Conservation Remote Maintenance Worker Program outcome reports (November 2018).
[56] Including the required state match.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$26,186.0) This program change reduces support for the Alaska Rural and Native Villages Program. EPA estimates that the FY 2021 request of $3 million will improve the drinking water and/or wastewater services to approximately 350 homes in rural Alaska. The State Revolving Funds are an additional source of infrastructure funding that can continue to fund water system improvements in Alaska.

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: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$1,625,444.5***	***$1,638,826.0***	***$1,119,778.0***	***-$519,048.0***
Total Budget Authority	$1,625,444.5	$1,638,826.0	$1,119,778.0	-$519,048.0
Total Workyears	3.7	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. These funds directly support the Agency's goal to ensure waters are clean through improved water infrastructure and sustainable management.

The CWSRF is 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, green infrastructure projects, and agricultural Best Management Practices (BMPs). The Program also includes a provision for set-aside funding for tribes to address serious wastewater infrastructure needs and associated health impacts. In addition, the CWSRF provides direct grant funding for the District of Columbia and U.S. territories. This federal investment is designed to be used in concert with other sources of funds to address water quality needs.[57] Additional tools, such as additional subsidization, are available as part of the CWSRF Program to assist small and disadvantaged 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 for years in the future.

The revolving nature of the funds and substantial state contributions have greatly multiplied the federal investment. EPA estimates that for every federal dollar contributed thus far the nation has received approximately three dollars of investment in water infrastructure. As of June 2019, the state CWSRFs have provided over $138 billion in affordable financing for a wide variety of wastewater infrastructure and other water quality projects.[58] In 2019, over 1,600 assistance agreements went to communities of all sizes, funding $6.2 billion in projects aimed at treating wastewater, addressing stormwater runoff, tackling non-point source pollution, and addressing a myriad of other environmental issues.[59]

[57] For additional information, please see: http://www.epa.gov/cwsrf.
[58] 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, 2019).
[59] 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, 2019).

FY 2021 Activities and Performance Plan:

Work in this Program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. This federal investment will continue to enable progress toward the Nation's clean water needs and infrastructure priorities and will contribute to the long-term performance goal to reduce the number of square miles of watershed with surface water not meeting standards by 37,000 square miles by September 30, 2022. In FY 2019, EPA exceeded its ambitious target for reducing the square miles of watersheds with surface waters not meeting standards. Over 12,700 square miles of watershed area that contained impaired waters in FY 2018 are now meeting water quality standards.

EPA continues to work with states to meet several key objectives, such as:

- Linking projects to environmental results;
- Targeting assistance to small and underserved communities with limited ability to repay loans; and
- Ensuring the CWSRFs remain reliable sources of affordable funding.

The Agency is requesting over $2 billion in the FY 2021 President's Budget to provide funding for critical wastewater infrastructure. In FY 2021, EPA requests nearly $2 billion for the Clean Water and Drinking Water State Revolving Funds (SRFs), combined. These funding levels further infrastructure repair and replacement and would allow states, municipalities, and private entities to continue to finance high-priority infrastructure investments that protect human health.

To help drive progress, the Agency has set the FY 2020-2021 Agency Priority Goal that by September 30, 2021, EPA will increase by $16 billion the non-federal dollars leveraged by EPA water infrastructure finance Programs (CWSRF, DWSRF, and WIFIA). During FY 2018 and FY 2019, EPA increased the non-federal dollars leveraged by EPA water infrastructure finance Programs by $20.0 billion, exceeding our two-year FY 2018-2019 APG target of $16 billion. In addition to meeting the APG, EPA met all of the contributing indicators: Engagements with the Water Infrastructure Community; Tools, Training, and Resources Provided to the Water Infrastructure Community; and SRF State Reviews completed. The success of this metric is due to the collaborative efforts of EPA, states, and local communities.

The FY 2021 capitalization of the Clean Water SRF would supplement the more than $138 billion in assistance provided over the life of the Program. The assistance provided in 2019 from federal capitalization, state contributions, and repayments was $6.2 billion.

EPA requests that an amount equal to 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 forgiveness of principal, negative interest loans, or grants (or any combination of these). The CWSRF Program also implements American Iron and Steel (AIS) requirements, as required by law.

In addition to capitalizing the CWSRF, a portion of the appropriation also will provide direct grants to communities within the tribes and territories. These communities are in great need of assistance

given that their sanitation infrastructure lags behind the rest of the country, causing significant public health concerns. To ensure sufficient resources are directed toward these communities that face additional challenges, EPA continues to request a tribal set-aside of 2 percent, or $30 million, whichever is greatest, of the funds appropriated in FY 2021. EPA also continues to request a territories set-aside of 1.5 percent of the funds appropriated from the CWSRF for American Samoa, Guam, the Commonwealth of Northern Marianas, and the United States Virgin Islands.

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 for 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), authority similar to that already available to states. 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.

EPA will partner with states to ensure that the CWSRF 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 is working to redesign the databases currently used to collect performance information about the CWSRF and the Drinking Water State Revolving Fund (DWSRF) Programs. The aim is for this effort to reduce reporting burden by eliminating redundancy and providing a more user-friendly interface for states to submit data.

Elsewhere in the FY 2021 budget, EPA requests $25 million for the Water Infrastructure Finance and Innovation Act (WIFIA) Program. Through WIFIA, EPA will make direct loans to regionally or nationally significant water infrastructure projects. These combined investments, the SRFs and WIFIA, further the Agency's ongoing commitment to infrastructure repair and replacement.

Performance Measure Targets:

(PM INFRA-01) Number of non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					8.0	8.0	8.0	8.0	Billions of Dollars
Actual	5.6	5.3	8.1	8.6	9.7	10.3			

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

The FY 2021 capitalization of the Clean Water SRF would supplement the more than $138 billion in assistance provided over the life of the program. The assistance provided in 2019 from federal

capitalization, state contributions, and repayments was $6.2 billion. Changes from levels included in the Estimated FY 2020 Enacted Budget include:

- (-$519,048.0) This program change is a decrease to the Clean Water SRF Program. Investments in the two SRFs, combined with the WIFIA Program, will still promote and leverage water and wastewater infrastructure improvements.

Statutory Authority:

Title VI of the Clean Water Act; Title V of the Water Resources Reform and Development Act of 2014.

Infrastructure Assistance: Drinking Water SRF
Program Area: State and Tribal Assistance Grants (STAG)
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$1,131,822.3***	***$1,126,088.0***	***$863,235.0***	***-$262,853.0***
Total Budget Authority	$1,131,822.3	$1,126,088.0	$863,235.0	-$262,853.0
Total Workyears	2.5	1.4	1.4	0.0

Program Project Description:

EPA's Drinking Water State Revolving Fund (DWSRF) is designed to assist public water systems to finance the costs of drinking water infrastructure improvements needed to achieve or maintain compliance with Safe Drinking Water Act (SDWA) requirements, to protect public health, and to support state and local efforts to protect drinking water. The 2015 Drinking Water Infrastructure Needs Survey and Assessment (DWINSA), which is conducted every four years, indicated a 20-year capital investment need of $472.6 billion for public water systems that are eligible to receive funding from state DWSRF Programs. The capital investment need covers 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 reflects costs for repairs and replacement of leaking transmission pipes and deteriorated storage and treatment equipment, as well as new infrastructure and other projects (for example: replacing lead service lines) required to protect public health and to ensure compliance with the SDWA.

To reduce public health risks and to help ensure safe and reliable delivery of drinking water nationwide, EPA makes capitalization grants to states so that they can 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 utilize set-asides to assist small systems and those most in need on a per household basis according to state affordability criteria.

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 in the form of loans which water utilities repay from the revenues they generate through 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, much of which may be approaching the end of its useful life.

EPA is focusing on the needs of small community systems, while retaining state flexibility in the management of their funds. EPA continues its small systems emphasis by working closely with state Programs to improve public water system sustainability and public health protection for persons served by small water systems.

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 set-asides[60] are: Small System Technical Assistance (up to 2 percent), Administrative and Technical Assistance[61] (up to 4 percent, $400,000 or 1/5th percent of the current valuation of the fund, whichever is greater), State Program Management (up to 10 percent), and Local Assistance and Other State Programs (up to 15 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. Historically, the states have set aside an annual average of 16 percent of the funds awarded to them for Program development, of which approximately 4 percent is used to administer the Program; however, over the past three years, states have increased their set-asides to approximately 22 percent.

Non-Federal 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 equal to 195 percent of the federal capitalization invested in the Program since its inception in 1997. In other words, for every dollar the federal government invests in this Program, the states, in total, have delivered almost $2.00 in assistance to water systems. In addition, the DWSRF's rate of funds utilized[62] was 95.3 percent in 2019, nearly hitting its funds utilization target of 96 percent.

National Set-Asides

Prior to allotting funds to the states, EPA is required to reserve certain national level set-asides.[63] Two million dollars must, by statute, be allocated to small systems monitoring for unregulated contaminants to facilitate small water system compliance with the monitoring and reporting requirements of the Unregulated Contaminant Monitoring Regulation (UCMR). Historically, a three-year sampling period occurs within each five-year monitoring cycle. During the sampling

[60] For more information, please see: https://www.epa.gov/drinkingwatersrf/how-drinking-water-state-revolving-fund-works#tab-5.
[61] For more information, please see: https://www.congress.gov/bill/114th-congress/senate-bill/612/text.
[62] The cumulative dollar amount of loan agreements divided by cumulative funds available for projects.
[63] Safe Drinking Water Act Sections 1452(i)(1), 1452(i)(2), 1452(j), and 1452(o), as amended.

period, fund utilization exceeds the annual appropriation of $2 million and the carry-over reserve funds from non-sampling years are essential to complete the small system monitoring efforts.

EPA will reserve up to 2 percent, or $20 million, whichever is greater, of appropriated funds for 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 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.

FY 2021 Activities and Performance Plan:

Work in this Program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water, of the *FY 2018 - 2022 EPA Strategic Plan* to increase by $40 billion the number of non-federal dollars leveraged by EPA water infrastructure finance Programs (CWSRF, DWSRF and WIFIA)., and the related FY 2020 – 2021 Agency Priority Goal (APG), established during the FY 2021 budget development process. The goal of the APG - Empower communities to leverage EPA water infrastructure investments – is to increase by $16 billion the non-federal dollars leveraged by the EPA water infrastructure finance Programs by September 30, 2021. For FY 2021, EPA requests $863 million for the DWSRF to help finance critical infrastructure improvement projects to public drinking water systems. In FY 2021, EPA requests nearly $2 billion for the Drinking Water and Clean Water State Revolving Funds (SRFs), combined. The budget provides robust funding for critical drinking and wastewater infrastructure.

The requested funding level reflects the documented needs for drinking water infrastructure and the need to improve infrastructure in small 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 clean and safe water. In FY 2018 – 2019, EPA, pursuant to the Annual Priority Goal and long-term performance infrastructure goals, increased the number of non-federal dollars leveraged by EPA water infrastructure finance Programs (CWSRF, DWSRF and WIFIA) by $20B. In FY 2021, EPA also will continue to expand local utilities' and existing state Programs' knowledge of the funding options available to meet future infrastructure needs.

EPA will continue to work to target a significant portion of assistance from SRFs to small and underserved communities with limited ability to repay loans. In FY 2021, EPA will work with states to ensure not less than 20 and not more than 30 percent of a state's capitalization grant is provided as additional subsidization. In addition, the America's Water Infrastructure Act (AWIA) of 2018 requires that states provide subsidization to assist disadvantaged communities of 6 percent to 35 percent of the state's capitalization grant.

In FY 2021, 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 align water infrastructure system goals, analyzing a range of infrastructure alternatives, including energy efficient alternatives, and ensuring that systems have the financial capacity and rate structures to construct, operate, maintain, and replace infrastructure over time.

In FY 2021, EPA is continuing emphasis on 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 within which states and water systems can work together to help these 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 2021, EPA will work with states to review and update their capacity development strategies to include asset management as required by (AWIA).

EPA also is seeking more efficient use of federal infrastructure funds by empowering communities to increase water infrastructure investments and non-federal dollars leveraged by water infrastructure finance Programs (Clean Water and Drinking Water SRF and WIFIA) to repair and modernize the outdated American water infrastructure.

Performance Measure Targets:

(PM DW-01) Community water systems out of compliance with health-based standards.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					3,510	3,380	3,280	3,060	CWSs
Actual	4,682	5,050	4,817	3,508	3,480	3,547			

(PM INFRA-01) Number of non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					8.0	8.0	8.0	8.0	Billions of Dollars
Actual	5.6	5.3	8.1	8.6	9.7	10.3			

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

The FY 2021 capitalization of the Drinking Water SRF would supplement more than $41.1 billion in assistance provided over the life of the Program. The assistance provided in 2019 from federal capitalization, state contributions, and repayments was $2.8 billion. Changes from levels included in the Estimated FY 2020 Enacted Budget include:

- (-$262,853.0) This program change is a decrease to the Drinking Water SRF Program. Investments in the two SRFs, combined with the WIFIA Program, promote water and wastewater infrastructure improvements.

Statutory Authority:

Safe Drinking Water Act § 1452.

Gold King Mine Water Monitoring

Program Area: State and Tribal Assistance Grants (STAG)
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$4,687.3***	***$4,000.0***	***$0.0***	***-$4,000.0***
Total Budget Authority	$4,687.3	$4,000.0	$0.0	-$4,000.0
Total Workyears	0.8	0.0	0.0	0.0

Program Project Description:

The Gold King Mine Water Monitoring Program supports the development and implementation of a monitoring program for rivers contaminated by the Gold King Mine Spill.

FY 2021 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2021.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$4,000.0) This funding change proposes to eliminate the Gold King Mine Water Monitoring Program. There are other sources of funding that support water monitoring activities, including the Pollution Control (Section 106) Grants Program.

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: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$14,653.9***	***$25,000.0***	***$0.0***	***-$25,000.0***
Total Budget Authority	$14,653.9	$25,000.0	$0.0	-$25,000.0

Program Project Description:

The U.S.-Mexico Border Water Infrastructure Program supports the planning, design, and construction of water and wastewater treatment facilities along the border with all projects benefiting communities on the U.S. side of the border.

FY 2021 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2021. The State Revolving Funds are a source of infrastructure funding that can continue to fund water system improvements in U.S. communities along the border.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$25,000.0) This funding change proposes to eliminate the U.S.-Mexico Border Water Infrastructure Program. Other sources of funding are available to support these efforts in U.S. communities along the border, most notably the Clean Water and Drinking Water State Revolving Funds.

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: A Cleaner, Healthier Environment
Objective(s): Improve Air Quality

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$31,736.7***	***$56,306.0***	***$0.0***	***-$56,306.0***
Total Budget Authority	$31,736.7	$56,306.0	$0.0	-$56,306.0

Program Project Description:

This program awards competitive grant funding to reduce air pollution in nonattainment areas that were ranked as the top five most polluted areas relative to annual ozone or PM2.5 National Ambient Air Quality Standards (NAAQS); as well as the top five areas relative to the 24-hour PM2.5 NAAQS. In FY 2019, over $50 million in competitive grant funds was allocated for this program for the same purpose. This program assists air control agencies in developing plans, conducting demonstrations, and implementing projects to reduce air pollution in these nonattainment areas.

FY 2021 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2021.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$56,306.0) This funding change proposes to eliminate the Targeted Airshed Grants program.

Statutory Authority:

Further Consolidated Appropriations Act, 2020, Pub. L. 116-94.

Safe Water for Small & Disadvantaged Communities
Program Area: State and Tribal Assistance Grants (STAG)
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$167.0***	***$25,408.0***	***$0.0***	***-$25,408.0***
Total Budget Authority	$167.0	$25,408.0	$0.0	-$25,408.0
Total Workyears	0.7	1.0	0.0	-1.0

Program Project Description:

The Safe Water for Small and Disadvantaged Communities Program provides grants to eligible entities for use in carrying out projects and activities to assist public water systems.

FY 2021 Activities and Performance Plan:

Resources and FTE are proposed for elimination for this program in FY 2021.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$25,408.0 / -1.0 FTE) This funding change proposes to eliminate the Safe Water for Small and Disadvantaged Communities Program. EPA will continue to work on awarding funds appropriated by Congress in FYs 2018 - 2020; however, in FY 2021, EPA will continue to request flexible subsidization funding to target small and disadvantaged communities through the State Revolving Funds.

Statutory Authority:

Water Infrastructure Improvements for the Nation Act, Title IV, Section 2104; Further Consolidated Appropriations Act, 2020, Pub. L. 116-94.

Reducing Lead in Drinking Water

Program Area: State and Tribal Assistance Grants (STAG)
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water, Revitalize Land and Prevent Contamination

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$62.0***	***$19,511.0***	***$20,000.0***	***$489.0***
Total Budget Authority	$62.0	$19,511.0	$20,000.0	$489.0
Total Workyears	0.4	1.0	0.0	-1.0

Program Project Description:

The Water Infrastructure Improvements for the Nation Act of 2016 (WIIN) was enacted to help communities address numerous drinking water and wastewater infrastructure issues. WIIN was part of the Water Resources Development Act of 2016, which includes provisions to improve water infrastructure around the country.

The Reducing Lead in Drinking Water grant program was established in Section 2105 of WIIN. Objectives of the grant program are to reduce the concentration of lead in drinking water by: (1) replacing publicly owned lead service lines; (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. Priority will be given to applications from disadvantaged communities.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018-2022 EPA Strategic Plan*, as well as the FY 2020-2021 Lead Agency Priority Goal and the Federal Lead Action Plan. The Lead APG is related to the reduction of childhood lead exposures and associated health impacts and includes a provision to establish drinking water lead testing programs for schools in all states and the District of Columbia. The FY 2021 request includes $20 million for the Reducing Lead in Drinking Water grant program. Funding will be used to provide grants to eligible entities for lead reduction projects in the United States.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$489.0 / -1.0 FTE) This net program change supports the Lead Exposure Reduction Initiative including supporting the goals of the Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts and EPA's Agency Priority Goal focused on lead.

Statutory Authority:

Water Infrastructure Improvements for the Nation Act, Title IV, Section 2105; Further Consolidated Appropriations Act, 2020, Pub. L. 116-94.

Lead Testing in Schools

Program Area: State and Tribal Assistance Grants (STAG)
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water, Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$995.0***	***$26,000.0***	***$15,000.0***	***-$11,000.0***
Total Budget Authority	$995.0	$26,000.0	$15,000.0	-$11,000.0

Program Project Description:

The Water Infrastructure Improvements for the Nation Act of 2016 (WIIN) was enacted to help communities address numerous drinking water and wastewater infrastructure issues. WIIN includes the Water Resource Development Act of 2016, which includes provisions to improve water infrastructure around the country. This Act specifically authorizes $100 million for communities facing drinking water emergencies, including helping communities recover from lead contamination. The America's Water Infrastructure Act of 2018 (AWIA) also strengthened many existing programs within EPA and various sections of WIIN while creating new programs to tackle significant public health concerns and environmental needs.

The FY 2021 request of $15 million will continue to fund the Voluntary School and Child Care Lead Testing Grant Program. This grant program was established in Section 2107 of WIIN and amended by Section 2006 of AWIA. Objectives of the grant program are to reduce childhood exposure to lead in drinking water by helping states target funding to schools and child care programs unable to pay for testing and establishing best practices for preventing lead in drinking water.

The FY 2021 request includes $5 million to support the Lead Exposure Reduction Initiative including supporting the goals of the Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts and EPA's APG focused on lead.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. Funding will be used to provide grants to assist local educational agencies in voluntary testing of lead contamination in drinking water at schools and child care programs. Work in this program project supports the FY 2020 – 2021 Lead Agency Priority Goal (APG) related to the reduction of childhood lead exposures and associated health impact with several provisions including establishing drinking water lead testing programs for schools in all states and the District of Columbia. Work in this program also supports EPA's implementation of the Federal Lead Action Plan.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$11,000.0) This program change is an overall reduction to the Voluntary School and Child Care Lead Testing Grant Program due to the need to prioritize among Administration priorities.

Statutory Authority:

Safe Drinking Water Act § 1464(d), as amended by AWIA, Pub. L. 115-270 § 2006.

Healthy Schools
Program Area: State and Tribal Assistance Grants (STAG)
Goal: A Cleaner, Healthier Environment
Objective(s): Ensure Safety of Chemicals in the Marketplace

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$0.0***	***$0.0***	***$50,000.0***	***$50,000.0***
Total Budget Authority	$0.0	$0.0	$50,000.0	$50,000.0

Program Project Description:

EPA is committed to protecting children where they live, learn, and play. The Agency understands that to be protective of children's health, as highlighted by the President's Task Force on Environmental Health Risks and Safety Risks to Children, it is essential that children be safe from environmental hazards. Although EPA provides grant funding to a wide range of initiatives focused on addressing risks to children's health, the Agency has no comprehensive environmental health management program to support school administrators and others in identifying and addressing some of the most common areas of environmental health concerns found in schools.

The proposed Healthy Schools Grant Program addresses potential gaps in school environmental health by supporting states, federally recognized Indian tribes, public pre-schools, local educational agencies as defined in 20 U.S.C. 7801(30), and non-profit organizations (including faith-based schools) in the identification and mitigation of potential environmental health issues. Recognizing that school environmental health challenges differ due to variations in geography, age of school infrastructure, population density, and other factors, the Program would provide EPA and its partners with flexibility to target funds to their highest priority efforts to protect human health and the environment in school settings. Under this Program, funding would be available to identify, prevent, reduce, and resolve environmental hazards, including preventing childhood lead exposure, reducing asthma triggers, promoting integrated pest management, and reducing or eliminating childhood exposure to toxics in schools across all environmental media.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.4, Ensure Safety of Chemicals in the Marketplace in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, funds would support the implementation of mandatory statutory duties delegated by EPA under pertinent environmental laws in relation to comprehensive school environmental health programs. States, federally recognized Indian tribes, public pre-schools, local educational agencies as defined in 20 U.S.C. 7801(30), and non-profit organizations would have the flexibility to apply the funds toward school environmental health activities required in a broad array of environmental statutes, depending on local needs and priorities. Results would be tracked as required by EPA's Environmental Results

Order and would support critical children's health work in school settings across multiple environmental programs.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$50,000.0) This investment provides grant funding focused on addressing risks to children's health across multiple environmental programs to identify, help prevent, reduce, and resolve environmental hazards in schools in ways responsive to local needs and priorities.

Statutory Authority:

Annual Appropriation Acts; Indian Environmental General Assistance Program Act (GAP); Pollution Prevention Act (PPA); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (1972), Section 20; Toxic Substances Control Act (TSCA), Section 10; Safe Drinking Water Act (SDWA), as amended by section 2104, 2105 and 2107 of the Water Infrastructure Improvements for the Nation Act (WIIN); Resource Conservation and Recovery Act (RCRA) of 1976, enacted as amendments to Solid Waste Disposal Act (SWDA); Comprehensive Environmental Response, and Compensation and Liability Act (CERCLA).

Note: EPA is currently seeking appropriations language to support this program: "$50,000,000 shall be for grants to States, federally recognized Indian tribes, public pre-schools, local educational agencies as defined in 20 U.S.C. 7801(30), and non-profit organizations, for detection, assessment, prevention, control, or abatement of pollution and other environmental hazards in school buildings as defined in 20 U.S.C. 3610(6), and related activities; Provided, that the federal share of the costs of such activities shall not exceed 75 percent; Provided further, that the Administrator may waive such cost share requirement in the case of schools located in economically distressed communities."

Drinking Water Infrastructure Resilience and Sustainability
Program Area: State and Tribal Assistance Grants (STAG)
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$0.0***	***$3,000.0***	***$2,000.0***	***-$1,000.0***
Total Budget Authority	$0.0	$3,000.0	$2,000.0	-$1,000.0

Program Project Description:

The America's Water Infrastructure Act of 2018 (AWIA) was enacted to help address numerous drinking water and wastewater issues including projects in small rural communities as well as large dollar-value projects for all communities. AWIA strengthens 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. AWIA strengthens many existing programs within EPA while creating new programs to tackle significant public health concerns and environmental needs. These programs are vital to protecting public health, continuing to grow the American economy and ensuring that rural and urban communities from coast-to-coast can thrive. New mandates range from the creation of grant programs to promoting water quality workforce development.

The FY 2021 request includes $2 million to fund the Drinking Water Infrastructure Resilience and Sustainability Grant Program. Section 2005 of AWIA requires EPA to establish a competitive grant program to assist eligible entities in the planning, design, construction, implementation, operation, or maintenance of a program or project that increases resilience to natural hazards. AWIA mandates, such as this program, will be critical to achieving the Administration's priorities by increasing water infrastructure investment and improving drinking water and water quality across the country.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. Activities in FY 2021 include the conservation of water or the enhancement of water use efficiency; the modification or relocation of existing drinking water system infrastructure made, or that is at risk of being, significantly impaired by natural hazards, including risks to drinking water from flooding; the design or construction of desalination facilities to serve existing communities; the enhancement of water supply through the use of watershed management and source water protection; the enhancement of energy efficiency or the use and generation of renewable energy in the conveyance or treatment of drinking water; or the development and implementation of activities to increase the resilience of the eligible entity to

natural hazards. EPA plans to issue grant awards for this program beginning in FY 2020. The FY 2021 request continues this grant program.

Performance Measure Targets:

Work under this program supports performance results in the Drinking Water State Revolving Fund and Categorial Grant: Public Water System Supervision Programs under the STAG appropriation and the Drinking Water Programs under the EPM appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$1,000.0) This program change is a reduction to the Drinking Water Infrastructure Resilience and Sustainability Grant Program.

Statutory Authority:

AWIA, P.L. 115-270, Section 2005.

Drinking Fountain Lead Testing
Program Area: State and Tribal Assistance Grants (STAG)
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$0.0***	***$0.0***	***$10,000.0***	***$10,000.0***
Total Budget Authority	$0.0	$0.0	$10,000.0	$10,000.0

Program Project Description:

The America's Water Infrastructure Act of 2018 (AWIA) was enacted to help address numerous drinking water and wastewater issues at large projects and small rural communities. AWIA strengthened many existing programs within EPA while creating new programs to tackle significant public health concerns and environmental needs.

The FY 2021 request includes $10 million to create the new Drinking Fountain Lead Testing Grant Program. Section 2006 of AWIA requires EPA to establish a grant program to help local educational agencies replace drinking water fountains manufactured prior to 1988. AWIA mandates will be critical to achieving the Administration's priorities by increasing water infrastructure investment and improving drinking water and water quality across the country, while also supporting the Administrator's commitment to protecting children where they live, learn, and play.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, funding priority will be given to local educational agencies based on economic need. Grants awarded under this program will be used to pay the costs of replacement of drinking water fountains in schools. The funds may be used to pay the costs of monitoring and reporting of lead levels in the drinking water of schools and local educational agencies receiving the funding. EPA plans to issue grant awards for this new program in FY 2021. Work in this program project supports the FY 2020 - 2021 Lead Agency Priority Goal (APG) and EPA's implementation of the Federal Lead Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts.

Performance Measure Targets:

EPA's FY 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$10,000.0) This program change reflects the Agency's support of the new Drinking Water Fountain Lead Testing Program under AWIA Section 2006. This also supports the Lead Exposure Reduction Initiative focus area including supporting the goals of the Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts and EPA's APG focused on lead.

Statutory Authority:

AWIA, P.L. 115-270, Section 2006.

Technical Assistance for Treatment Works
Program Area: State and Tribal Assistance Grants (STAG)
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$0.0***	***$12,000.0***	***$7,500.0***	***-$4,500.0***
Total Budget Authority	$0.0	$12,000.0	$7,500.0	-$4,500.0

Program Project Description:

The America's Water Infrastructure Act of 2018 (AWIA) was enacted to help address numerous drinking water and wastewater issues at large projects and small rural communities. AWIA strengthens 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. AWIA strengthens many existing programs within EPA while creating new programs to tackle significant public health concerns and environmental needs. These programs are vital to protecting public health, continuing to grow the American economy and ensuring that rural and urban communities from coast-to-coast can thrive. New mandates range from the creation of grant programs to promoting water quality workforce development. AWIA mandates will be critical to achieving the Administration's priorities by increasing water infrastructure investment and improving drinking water and water quality across the country.

The FY 2021 request of $7.5 million will continue funding for the Technical Assistance for Treatment Works Grant Program. Section 4103 of AWIA authorizes EPA to provide grants to nonprofit organizations to help rural, small, and tribal municipalities obtain Clean Water State Revolving Fund (CWSRF) Program financing and share information on planning, design, construction, and operation of wastewater systems. This training and technical assistance will assist small rural wastewater systems to improve operational performance and sustainable operations over the long term, thereby improving public health and water quality and protecting infrastructure investments. This funding will provide training to operators, staff, and managers on sustainable and effective management, finance, and operations.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. In FY 2021, EPA will provide grants to nonprofit organizations to help rural, small, and tribal municipalities obtain CWSRF financing, protect water quality and ensure Clean Water Act compliance, and share information on planning, design, construction, and operation of wastewater systems. EPA aims to issue grant awards for this program beginning in FY 2020. The FY 2021 request continues this grant program.

Performance Measure Targets:

Work under this program supports performance results in the Drinking Water State Revolving Fund and CWSRF Programs under the STAG appropriation and the Water Infrastructure Finance and Innovation Act (WIFIA) Program under the WIFIA appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (-$4,500.0) This program change is a reduction to the Technical Assistance for Treatment Works Grant Program due to the need to reprioritize resources among Administration priorities.

Statutory Authority:

AWIA, P.L. 115-270, Section 4103.

Sewer Overflow Control Grants
Program Area: State and Tribal Assistance Grants (STAG)
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$0.0***	***$28,000.0***	***$61,450.0***	***$33,450.0***
Total Budget Authority	$0.0	$28,000.0	$61,450.0	$33,450.0

Program Project Description:

The America's Water Infrastructure Act of 2018 (AWIA) was enacted to help address numerous drinking water and wastewater issues at large projects and small rural communities. AWIA strengthens 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. AWIA strengthens many existing programs within EPA while creating new programs to tackle significant public health concerns and environmental needs. These programs are vital to protecting public health, continuing to grow the American economy, and ensuring that rural and urban communities from coast-to-coast can thrive. New mandates range from the creation of grant programs to promoting water quality workforce development. AWIA mandates will be critical to achieving the Administration's priorities by increasing water infrastructure investment and improving drinking water and water quality across the country.

The FY 2021 request of $61.45 million will increase funding for the Sewer Overflow Control Grants Program. This program provides grants to fund projects at treatment works that reduce the incidence of combined sewer overflows, sanitary sewer overflows, and stormwater issues.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. Section 4106 of AWIA re-authorizes and amends the Clean Water Act grant program components for addressing sewer overflows and stormwater management. EPA will award grants with a to-be-developed formula that captures stormwater 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 innovative activities. EPA aims to issue grant awards for this new program beginning in FY 2020. The FY 2021 request continues this grant program.

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 under the WIFIA appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$33,450.0) This increase to the Sewer Overflow Control Grants Program will fund additional projects at treatment works that reduce the incidence of combined sewer overflows, sanitary sewer overflows, and stormwater issues.

Statutory Authority:

AWIA, P.L. 115-270, Section 4106.

Water Infrastructure and Workforce Investment
Program Area: State and Tribal Assistance Grants (STAG)
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
State and Tribal Assistance Grants	***$0.0***	***$1,000.0***	***$1,000.0***	***$0.0***
Total Budget Authority	$0.0	$1,000.0	$1,000.0	$0.0

Program Project Description:

The America's Water Infrastructure Act of 2018 (AWIA) was enacted to help address numerous drinking water and wastewater issues at large projects and in small rural communities. AWIA strengthens 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. AWIA strengthens many existing programs within EPA while creating new programs to tackle significant public health concerns and environmental needs. These programs are vital to protecting public health, continuing to grow the American economy and ensuring that rural and urban communities from coast-to-coast can thrive. New mandates range from the creation of grant programs to promoting water quality workforce development. AWIA mandates will be critical to achieving the Administration's priorities through increasing water infrastructure investment and improving drinking water and water quality across the country.

The FY 2021 request of $1 million will continue funding for the Water Infrastructure and Workforce Investment Grant Program. Section 4304 of AWIA requires EPA, in consultation with the United States Department of Agriculture, to establish a competitive grant program to promote water utility workforce development and increase public awareness of water utilities and careers. AWIA authorizes EPA to select non-profit, labor, or educational institutions that are experienced and qualified and that will address diverse types of water utilities. The Water Infrastructure and Workforce Investment Grant Program will assist in the development and utilization of activities related to workforce development and career opportunities in the water utility sector. Providing this funding will promote the direct connection to industry employers for a skilled and diverse workforce. The funding can support pre-apprenticeship and apprenticeship programs, on the job training, test preparation for skilled trade apprenticeships, and work-based learning opportunities. Water and wastewater utilities provide a unique opportunity to high-quality careers and it is imperative to invest in a skilled and diverse workforce for the future.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. EPA aims to issue the grant awards for this program beginning in FY 2020. The FY 2021 request continues this grant program.

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 under the WIFIA appropriation.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- No change in program funding.

Statutory Authority:

42 U.S.C. 300j-19e, AWIA, P.L. 115-270, Section 4304.

Water Infrastructure Finance
and Innovation Fund

Table of Contents – Water Infrastructure Finance and Innovation Fund

Program Projects in WIFIA 676
Water Quality Protection 677
Water Infrastructure Finance and Innovation 678

Environmental Protection Agency
FY 2021 Annual Performance Plan and Congressional Justification

APPROPRIATION: Water Infrastructure Finance and Innovation Fund
Resource Summary Table

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Water Infrastructure Finance and Innovation Fund				
Budget Authority	$32,565.9	$60,000.0	$25,023.0	-$34,977.0
Total Workyears	22.1	28.4	12.0	-16.4

Bill Language: WIFIA

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, $20,000,000, 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 $4,170,000,000: 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 pursuant to the fourth proviso under the heading "Water Infrastructure Finance and Innovation Program Account" in division D of the Omnibus Appropriations Act, 2020 (Public Law 116–94).

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 for the purposes provided in such sections.

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, $5,023,000, to remain available until September 30, 2022.

Program Projects in WIFIA

(Dollars in Thousands)

Program Project	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Water Quality Protection				
Water Infrastructure Finance and Innovation	$32,565.9	$60,000.0	$25,023.0	-$34,977.0
TOTAL WIFIA	**$32,565.9**	**$60,000.0**	**$25,023.0**	**-$34,977.0**

Water Quality Protection

Water Infrastructure Finance and Innovation
Program Area: Water Quality Protection
Goal: A Cleaner, Healthier Environment
Objective(s): Provide for Clean and Safe Water

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Water Infrastructure Finance and Innovation Fund	***$32,565.9***	***$60,000.0***	***$25,023.0***	***-$34,977.0***
Total Budget Authority	$32,565.9	$60,000.0	$25,023.0	-$34,977.0
Total Workyears	22.1	28.4	12.0	-16.4

Program Project Description:

The WIFIA Program provides and services direct loans to cover up to 49 percent of eligible costs for drinking water and wastewater infrastructure projects of regional or national significance. The Program also is designed to offer credit assistance with flexible terms in order to attract private participation, to encourage new revenue streams for infrastructure investment, and to allow public agencies to get more projects done. The WIFIA Program requires a small appropriation compared to its potential loan volume and is expected to leverage significant funding for infrastructure. For instance, projects selected in the third round from the FY 2019 appropriations have the potential, when combined with other funding sources, to support over $12 billion in water infrastructure projects. With the requested $25 million, including $20 million in credit subsidy, EPA could provide up to $2 billion in direct credit assistance, which when combined with other funding sources could potentially help spur over $4 billion in total infrastructure investment.[1] This makes WIFIA Program credit assistance a powerful tool to help address a variety of water infrastructure needs.

Eligible assistance recipients include: corporations and partnerships, municipal entities, and State Revolving Fund (SRF) Programs. The WIFIA Program complements the existing SRF 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. Entities with complex water and wastewater projects are attracted to the WIFIA Program. EPA expects to provide assistance to a diverse set of projects.

For the FY 2019 appropriated funds, EPA issued a Notice of Funding Availability (NOFA) on April 5, 2019, requesting that prospective borrowers submit Letters of Interest (LOI). In the 2019 NOFA, EPA announced water reuse and recycling as a WIFIA priority for the first time. EPA received 51 LOIs for direct loans and selected 38 new projects to continue the application process.[2] Once reviewed and approved, the selected projects could result in WIFIA loans totaling approximately $6 billion to help finance over $12 billion in water infrastructure investments.

[1] The actual subsidy cost will be determined on a loan-by-loan basis.
[2] For more information, please see: https://www.epa.gov/wifia.

As of January 1, 2020, EPA has issued 14 WIFIA loans totaling over $3.5 billion in credit assistance to help finance over $8 billion for water infrastructure projects and create over 15,000 jobs. Information about the projects that EPA has selected to apply for a WIFIA loan can be found on EPA's website.[3]

The FY 2021 request of $25 million supports WIFIA drinking water and wastewater infrastructure projects (following the requirements of the Federal Credit Reform Act of 1990 and OMB Circulars A-11 and A-129). While the WIFIA Program provides expansive project eligibilities, particular project attributes will be emphasized in the project selection process. These attributes will be identified in the NOFA, published after appropriations, and may include attributes such as the extent of private financing, the ability to serve regions with significant water resource challenges, the regional or national significance, the likelihood that the project can proceed at an earlier date due to WIFIA financing, and the extent to which the project uses new or innovative approaches, among others.

The America's Water Infrastructure Act (AWIA) of 2018 reauthorized WIFIA and removed its characterization as a pilot Program. AWIA made a number of amendments to the WIFIA Program.

FY 2021 Activities and Performance Plan:

Work in this Program directly supports Goal 1/Objective 1.2, Provide for Clean and Safe Water in the *FY 2018 - 2022 EPA Strategic Plan*. Of the total $25 million request to implement the Program, $5 million is for EPA's management and operation administrative expenses, including contract support and associated Program payroll. The request 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 for an initial set of projects. The funds associated with the management and operation of the Program will be available for two years.

The FY 2021 budget 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).[4] Fee 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 $5 million request for management and operations administrative expenses.

To help drive progress, the Agency has set the FY 2020-2021 Agency Priority Goal that by September 30, 2021, EPA will increase by $16 billion the non-federal dollars leveraged by EPA water infrastructure finance Programs (CWSRF, DWSRF, and WIFIA). During FY 2018 and FY 2019, EPA increased the non-federal dollars leveraged by EPA water infrastructure finance Programs by $20.0 billion, exceeding our two-year FY 2018 – 2019 APG target of $16 billion. In addition to meeting the APG, EPA met all of the contributing indicators: Engagements with the Water Infrastructure Community; Tools, Training, and Resources Provided to the Water

[3] For more information on WIFIA projects, please see: https://www.epa.gov/wifia/wifia-selected-projects.
[4]For more information see EPA Fee Rule: https://www.federalregister.gov/documents/2017/06/28/2017-13438/fees-for-water-infrastructure-project-applications-under-wifia.

Infrastructure Community; and SRF State Reviews completed. The success of this metric is due to the collaborative efforts of EPA, states, and local communities.

Performance Measure Targets:

(PM INFRA-01) Number of non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units
Target					8.0	8.0	8.0	8.0	Billions of Dollars
Actual	5.6	5.3	8.1	8.6	9.7	10.3			

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+$792.0) This increase is due to the recalculation of base payroll costs.
- (-$35,000.0) This program change decreases the amount of credit subsidy funding available to make loans.
- (-$769.0 / -16.4 FTE) This program change decreases the FTE and associated payroll available for the WIFIA Program.

Statutory Authority:

Water Infrastructure Finance and Innovation Act of 2014.

E-Manifest

Table of Contents – Hazardous Waste Electronic Manifest System Fund

Program Projects in e-Manifest..... 683
Resource Conservation and Recovery Act (RCRA) 684
RCRA: Waste Management..... 685

Environmental Protection Agency
FY 2021 Annual Performance Plan and Congressional Justification

APPROPRIATION: Hazardous Waste Electronic Manifest System Fund
Resource Summary Table

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Hazardous Waste Electronic Manifest System Fund				
Budget Authority	$14,485.5	$0.0	$0.0	$0.0
Total Workyears	6.9	11.0	16.0	5.0

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 2021, to remain available until expended.

Note – This language is proposed under the FY 2021 Administrative Provisions.

Program Projects in e-Manifest

(Dollars in Thousands)

Program Project	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Resource Conservation and Recovery Act (RCRA)				
RCRA: Waste Management	$14,485.5	$0.0	$0.0	$0.0
TOTAL e-Manifest	**$14,485.5**	**$0.0**	**$0.0**	**$0.0**

Resource Conservation and Recovery Act (RCRA)

(Dollars in Thousands)

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Environmental Programs & Management	$58,728.3	$66,819.0	$50,399.0	-$16,420.0
Hazardous Waste Electronic Manifest System Fund	***$14,485.5***	***$0.0***	***$0.0***	***$0.0***
Total Budget Authority	$73,213.8	$66,819.0	$50,399.0	-$16,420.0
Total Workyears	290.4	296.8	233.2	-63.6

Total workyears in FY 2021 include 15.0 FTE funded by e-Manifest fees. FY 2019 Actuals include obligations of e-Manifest fees. E-Manifest fees are not included in FY 2020 Enacted or FY 2021 President's Budget levels, but EPA anticipates collecting approximately $26 million in e-Manifest fees in FY 2020 and FY 2021.

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. The Hazardous Waste Electronic Manifest Establishment Act (e-Manifest Act, Public Law 112-195), enacted on October 5, 2012, required EPA to develop a fee-based electronic hazardous waste manifest system. EPA launched the e-Manifest system on June 30, 2018. From the e-Manifest Program launch through December 2019, EPA has received over 2,700,000 manifests and collected over $20 million in 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.[1] 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 provide appropriated resources necessary to implement the e-Manifest Program, including system development, fee collection authority, rulemaking, and advisory committee establishment. In FY 2021, e-Manifest continues to be fully supported by user fees, which includes support for continuing development and operation of the system and agency personnel that support its use and further its implementation.

[1] For more information, please refer to: https://www.epa.gov/e-manifest/learn-about-hazardous-waste-electronic-manifest-system-e-manifest.

FY 2021 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Revitalize Land and Prevent Contamination, in the *FY 2018 – 2022 EPA Strategic Plan*. In FY 2021, EPA will operate the e-Manifest system and will collect and deposit user fees into the Hazardous Waste Electronic Manifest System Fund (approximately $26 million is anticipated). The authority to collect and spend fees requires authorization from Congress in annual appropriations bills.

In FY 2021, EPA plans to perform the following key activities:

- Engage industry users to ensure a seamless transition away from using mailed paper manifests. EPA will no longer accept mailed paper manifests after June 30, 2021.

- 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 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, manage and 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 IT 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 2021 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2021 Change from Estimated FY 2020 Enacted Budget (Dollars in Thousands):

- (+5.0 FTE) This net program change reflects an increase in fee-funded reimbursable FTE that will support and enhance the e-Manifest program in FY 2021.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) and the Hazardous Waste Electronic Manifest Establishment Act.

Program and Performance Assessment

Environmental Protection Agency
FY 2021 Annual Performance Plan and Congressional Justification

Table of Contents – Program and Performance Assessment

Introduction..... 690
Goal 1: A Cleaner, Healthier Environment..... 699
Goal 2: More Effective Partnerships..... 721
Goal 3: Greater Certainty, Compliance, and Effectiveness..... 727

FY 2019 Annual Performance Report

Introduction

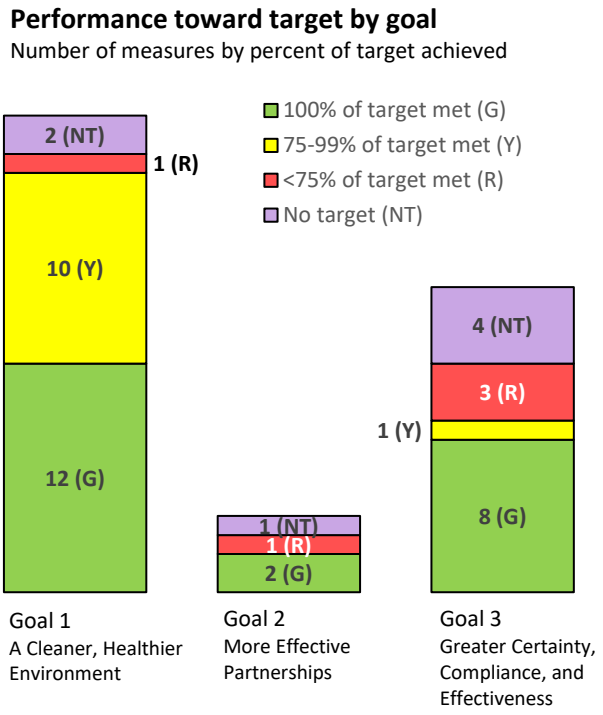
EPA's *FY 2019 Annual Performance Report* (APR) describes the second year of progress toward the strategic goals and objectives in the *FY 2018-2022 EPA Strategic Plan*, available at https://www.epa.gov/planandbudget/strategicplan. This APR presents results against the annual performance goals and targets in the Agency's *FY 2019 Annual Performance Plan (APP) and Congressional Justification (CJ)* as updated in the FY 2020 APP and CJ. Please also refer to EPA's *FY 2019 Agency Financial Report* (AFR), available at https://www.epa.gov/planandbudget/fy-2019-agency-financial-report, for information on financial performance results.

Organization of the FY 2019 APR

EPA's FY 2019 performance results and trend data are integrated throughout the FY 2021 APP and the CJ in the Budget Introduction, Goal Overviews, and Program Project Fact Sheets. The Program Performance and Assessment section (Tab 13) is the primary component of EPA's FY 2019 APR. This section also includes EPA's FY 2021 annual performance goal targets and any revisions to FY 2020 targets. This section is organized by strategic goal. For each strategic goal, there is a Goal-at-a-Glance Overview and a detailed multiyear table 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 Lean Management System (ELMS), a set of practices and tools that supports Agency employees in identifying and solving problems for optimal performance results.

FY 2019 Performance Data

FY 2019 Annual Performance Goal Results



For FY 2019, EPA reduced its number of annual performance goals (from 114 to 45) to focus on its most ambitious targets, including annualized long-term performance goals and measures representing key work areas that support those long-term performance goals. EPA met 58% of the targets in their entirety for annual performance goals with FY 2019 targets and data available (22 of 38). For 11 of its annual performance goals with FY 2019 targets and data available (29%), the Agency achieved between 75-99% of the target (including nine where the Agency achieved between 90-99% of the target). For five of its annual performance goals with FY 2019 targets and data available (13%), the Agency achieved less than 75% of the target.

In the *FY 2018-2022 EPA Strategic Plan*, EPA set ambitious targets. While EPA is making significant progress toward a broad range of policy outcomes, the Agency missed targets for 16 (of 38) annual performance goals that had FY 2019 targets and data available. Reasons for missed targets include delays in program implementation, the complexity of the environmental challenge, resource/staffing challenges, the lapse in government appropriations in December 2018 – January 2019, and other factors outside of the Agency's control (such as fewer requests than expected for EPA actions). In some areas with missed targets, the Agency nevertheless made significant improvements in its performance over recent years. EPA will continue to make progress toward its performance targets by applying ELMS to improve the efficiency and cost effectiveness of its operations. More detail is available throughout the report.

No FY 2019 results are available for four of the Agency's annual performance goals as of February 2020, due to data quality assurance/quality control processes, or no actions due during FY 2019. As additional results data are received for FY 2019 annual performance goals, the Agency will include the results in future APRs. Finally, FY 2019 results are reported for three of the Agency's annual performance goals for which no targets were established.

Fiscal Year 2018 Data Now Available

EPA received final results for one of the 16 annual performance goals with missing data at the end of FY 2018. EPA met the target in its entirety for that annual performance goal.[1] The Agency has no data for the other 15 annual performance goals because the methodology was not fully established in FY 2019,[2] no actions were due in FY 2018,[3] or the measures were discontinued.[4]

Verification/Validation of Performance Data

EPA maintains Data Quality Records (DQRs) to ensure consistency and quality of data used for annual performance goal reporting. These DQRs outline the results being measured; data sources and limitations; methods for calculating results; and controls to ensure good data quality. The Agency developed DQRs for all 26 of the long-term performance goals in the *FY 2018-2022 EPA Strategic Plan*, available at https://www.epa.gov/planandbudget/results.

FY 2018-2019 Agency Priority Goals

EPA met targets for three of the six FY 2018-2019 Agency Priority Goals (APGs) in the *FY 2018-2022 EPA Strategic Plan* (water infrastructure, environmental compliance, permitting decisions) and missed targets for three of the six APGs (redesignation of areas to air quality attainment, site cleanups, and chemical safety). Complete FY 2018-2019 APG Action Plans and Quarterly Progress Updates are available at https://www.performance.gov/EPA/APG_epa_1.html.

- **Improve air quality by implementing pollution control measures to reduce the number of nonattainment areas.** *By September 30, 2019, EPA, in close collaboration with states, will reduce the number of nonattainment areas to 138 from a baseline of 166.*

  Missed FY 2018-2019 target. As anticipated in APG quarterly updates, EPA missed the APG target of 138 remaining nonattainment areas by nine areas (the APG target was based on projections prior to FY 2018 – i.e., during calendar year 2017). Based on discussions with state, tribal, and local air agencies over the past year, EPA projected 146 of the 166

[1] PM 432: Percentage of Clean Water Act National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits.
[2] PM SWP-01: Watersheds with surface waters not meeting standards (cumulative); PM ST1: Percentage of grant commitments achieved by states, tribes, and local communities; PM RG1: Percentage of legal deadlines met by EPA; and PM OP1: Number of operational processes improved.
[3] PM TSCA1: Number of final EPA-initiated TSCA risk evaluations completed within statutory timelines; and PM TSCA2: Number of final existing chemical TSCA risk management actions completed within statutory timelines.
[4] PM DV: Percent of measured air quality improvement in counties not meeting the NAAQS from the 2016 baseline; PM M92: Cumulative percentage reduction in the number of days with Air Quality Index (AQI) values over 100 since 2003, weighted by population and AQI value; PM NOX: Ozone Season emissions of nitrogen oxides (NOx) from electric power generation sources; PM S01: Remaining US Consumption of hydrochlorofluorocarbons (HCFCs), chemicals that deplete the Earth's protective ozone layer, measured in tons of Ozone Depleting Potential (ODP); PM NPDES-01: Percentage of high-priority state NPDES permits that are issued in the fiscal year; PM NPDES-02: Percentage of high-priority EPA and state NPDES permits (including tribal) that are issued in the fiscal year; PM 426: Number of compliance assurance actions in accordance with EPA's civil enforcement response policies: PM FO2: Percentage of FOIA requests completed within statutory deadlines; and PM PE1: Percentage of permitting-related decisions issued within 6 months.

nonattainment areas would remain at the end of FY 2019 (166 is the baseline number of nonattainment areas that was defined in the *FY 2018-2022 EPA Strategic Plan* in the beginning of FY 2018). At the end of FY 2019, 147 areas remained in nonattainment. However, work was also completed during FY 2019 to redesignate four additional areas that did not become effective until FY 2020 in October 2019. Looking ahead, EPA projects redesignating a total of 15 nonattainment areas by the end of FY 2020 (including the four redesignations that recently became effective in October 2019), which should reduce the remaining amount of nonattainment areas to 132 by September 2020. Overall, EPA is on track to meet its long-term performance goal of reducing the number of nonattainment areas to 101 by FY 2022.

- **Empower communities to leverage EPA water infrastructure investments.** *By September 30, 2019, EPA will increase by $16 billion the non-federal dollars leveraged by EPA water infrastructure finance programs (Clean Water and Drinking Water State Revolving Funds and the Water Infrastructure Finance and Innovation Act).*

  Met FY 2018-2019 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 $20.0 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 to meeting the APG, EPA met 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 success of this metric 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, 2019, EPA will make an additional 102 Superfund sites and 1,368 brownfields sites ready for anticipated use (RAU).*

  Missed FY 2018-2019 target. Over the two-year time period, EPA made 99 Superfund sites RAU, 97% of the two-year goal of 102 sites, and 1,771 brownfields sites RAU, 133% of the two-year goal of 1,368 sites.

  The Superfund Task Force released its final report in September 2019. Several recommendations were especially designed to advance progress toward RAU goals, including: ensuring that site-wide RAU performance measure information is up-to-date and readily accessible on the Superfund Redevelopment Initiative website (https://www.epa.gov/superfund-redevelopment-initiative) and expanding the list of confirmed site-wide RAU sites to include site reuse status (Rec 34); improving risk communication with communities and stakeholders at Superfund sites (Rec 40); enhancing engagement about cleanup actions at federal facilities (Rec 41); and engaging the National Environmental Justice Advisory Council, under which a working group developed a series of draft recommendations to identify barriers and opportunities related to cleanup and reuse of Superfund sites (Rec 42).

Over the two-year period, EPA used the ELMS deployment process and Lean techniques to reduce brownfields data entry backlogs. In addition to undertaking an effort to reduce the work package backlog, the Program established visual management practices and a standard operating procedure to contact closed grant recipients and update accomplishment data accordingly.

- **Meet new statutory requirements to improve the safety of chemicals in commerce.** *By September 30, 2019, EPA will complete in accordance with statutory timelines (excluding statutorily-allowable extensions): 100% of required EPA-initiated Toxic Substances Control Act (TSCA) risk evaluations for existing chemicals; 100% of required TSCA risk management actions for existing chemicals; and 80% of TSCA pre-manufacture notice final determinations.*

  Missed FY 2018-2019 target; some data not available because there were no statutory deadlines for TSCA risk evaluations or risk management actions in FY 2018-2019. Despite the continuing need for recruitment and training of new staff for critical work, EPA is on track toward meeting the long-term performance goals, with key milestones achieved or in progress. In FY 2019, EPA released draft risk evaluations for four of the 10 chemicals on the initial priority list (Pigment Violet-29, 1,4-Dioxane, Cyclic Aliphatic Bromide Cluster [HBCD], 1-Bromopropane), and expects to finalize all 10 evaluations in FY 2020. EPA also released for public comment proposed designations of 20 additional high-priority chemicals for risk evaluation, along with 20 low-priority chemicals that will not be evaluated at this time (the final designations are expected in FY 2020); and issued a proposed rule covering five Persistent, Bioaccumulative and Toxic (PBT) chemicals, with the final rule expected in December 2020.

  Although substantially improved from FY 2018, the performance rate of all TSCA pre-manufacture notice (PMN) final determinations completed within 90 days was 78% in FY 2019, slightly below the 80% target. Contributing factors included frequent submitter requests for suspensions of review, increased complexity of the review process under amended TSCA, and continuing need for recruitment and training of new staff. Given the positive year-over-year trend, EPA expects to meet the long-term performance goal to complete all PMN final determinations within 90 days by FY 2022. EPA expects improvement by applying findings from the Lean assessments completed in FY 2018 and FY 2019, introducing further information technology enhancements, and bringing additional staff on board.

- **Increase environmental law compliance rate.** *Through September 30, 2019, EPA will increase compliance by reducing the percentage of Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance (SNC) with their permit limits to 25.7% from a baseline of 29.4%.*

  Met FY 2018-2019 target. EPA reduced the NPDES SNC rate from a FY 2018 baseline rate of 29.4% to 25.0% at the end of FY 2019, exceeding the APG target. To achieve this goal, the Agency established an EPA-state workgroup to develop and implement

approaches for reducing the SNC rate in areas where EPA and/or authorized states can have a significant impact. Building on initial workgroup efforts, the workgroup members from EPA and 15 state government agencies convened a national meeting in spring 2019 to work collaboratively on refining priority projects and longer-term implementation strategies to achieve the established targets. EPA and states identified multiple approaches for attacking this problem. Important over the two years of the APG was the effort to improve national NPDES Program data quality and completeness through increased permittee submission of monitoring reports and improved transfer of data from states. The Agency will continue efforts to reduce the NPDES SNC rate by a full 50% as an OECA FY 2020-2023 National Compliance Initiative.

- **Accelerate permitting-related decisions.** *By September 30, 2019, EPA will reduce by 50% the number of permitting-related decisions that exceed six months.*

  Met FY 2018-2019 target. EPA conducted comprehensive Lean business process improvement events to streamline and optimize the Agency's key permitting programs, reducing the number of permitting-related decisions that exceed six months by 53% in FY 2019 and 65% since June 2018, exceeding the 50% goal. Looking forward, EPA plans to: finalize a national strategy to eliminate the NPDES permit backlog; continue to identify NPDES permits that are delayed due to Endangered Species Act consultation, and actions that may be taken to streamline the process; and expand the scope of the APG to include backlogged air permits (measured against statutory timelines) and backlogged renewals for existing permits.

Evidence and Evaluation

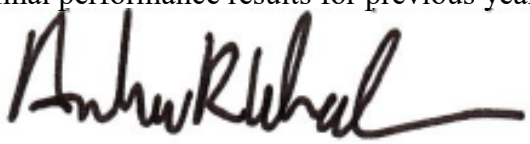
Summaries of program evaluations completed during FY 2019, and additional FY 2019 contributions to EPA's portfolio of evidence, are available at https://www.epa.gov/planandbudget/results. EPA uses program evaluations and other evidence to ensure programs are meeting Agency goals, to improve mission delivery, and to utilize evidence in decision making. Program evaluations and other evidence help EPA identify activities that benefit human health and the environment, provide the roadmap needed to replicate successes, and identify areas needing improvement. This is particularly important for fostering transparency and accountability.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

THE ADMINISTRATOR

Reliability of the 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 2019 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 some of our performance measures for this reporting year. When possible, however, we have portrayed trend data to illustrate progress over time. We also report final performance results for previous years that became available in FY 2019.



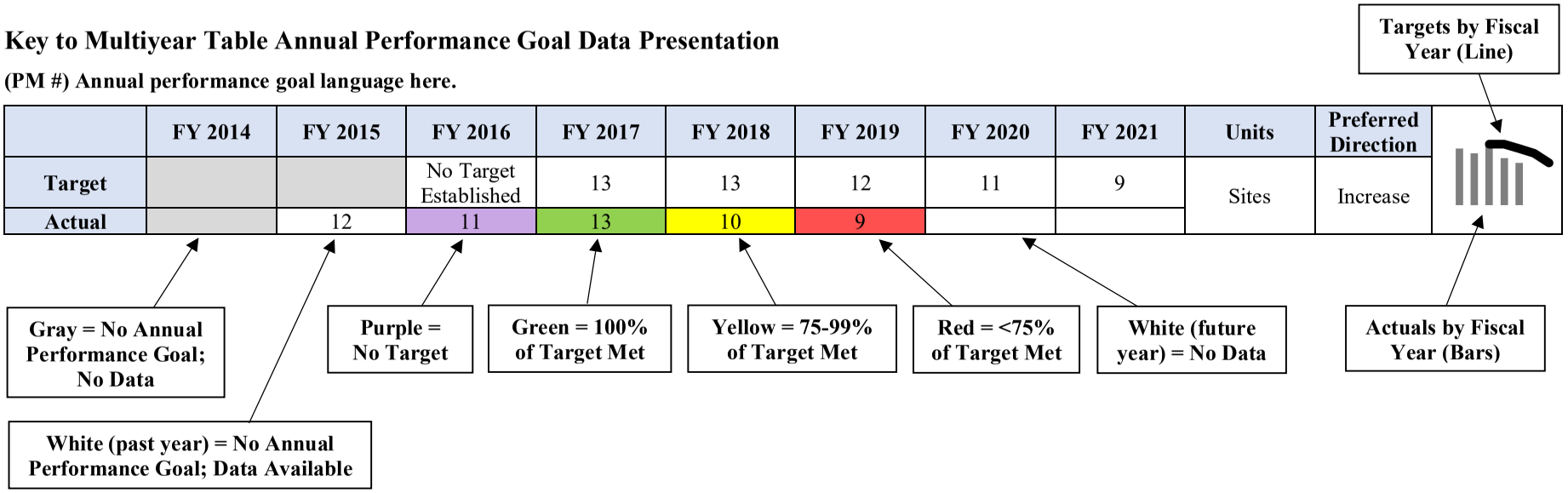
JAN 3 1 2020

Andrew R. Wheeler
Administrator

Date

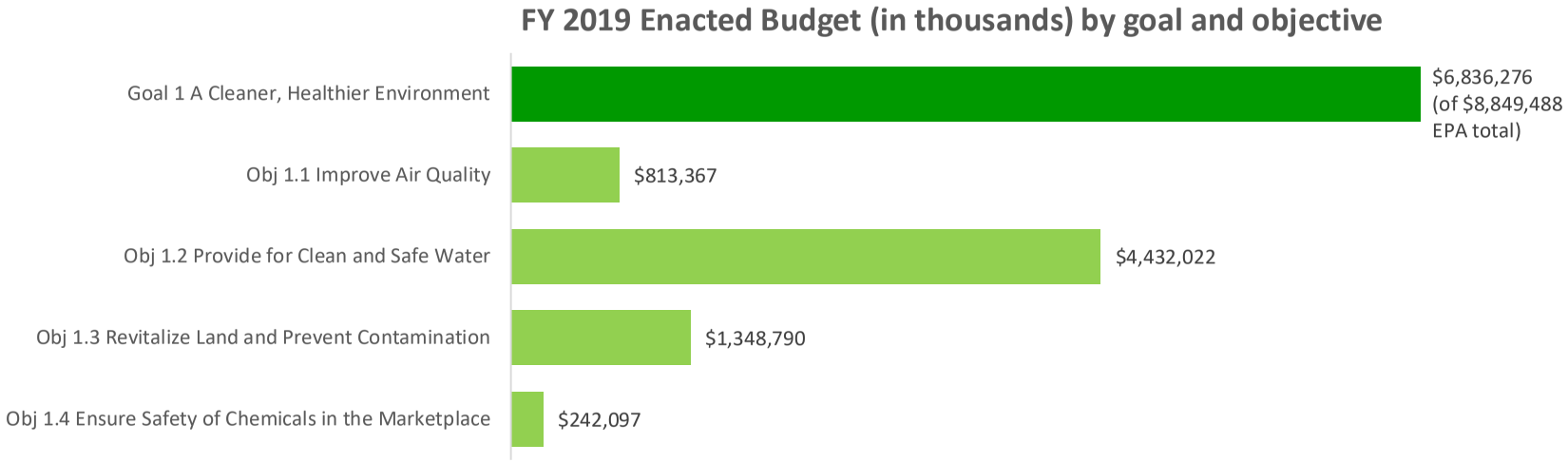
Key to Multiyear Table Annual Performance Goal Data Presentation

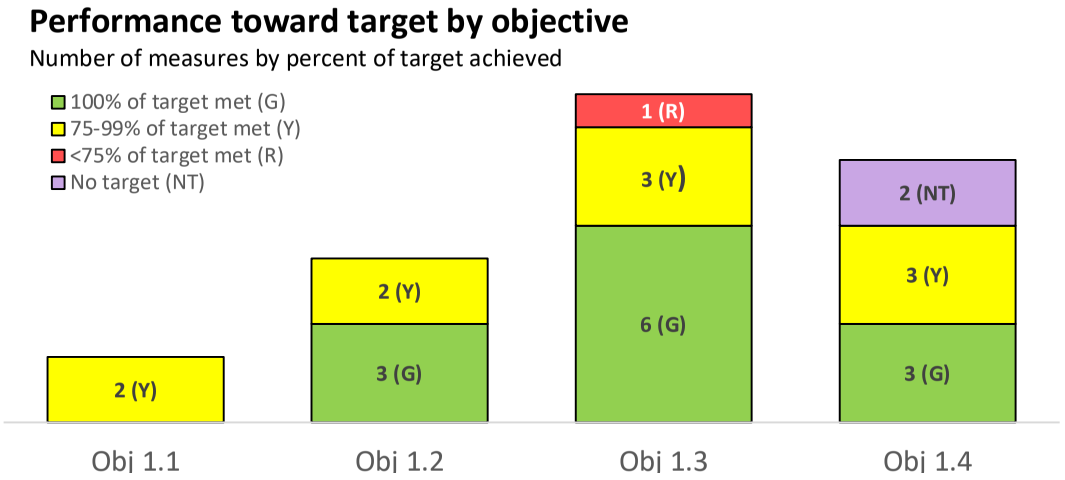
(PM #) Annual performance goal language here.



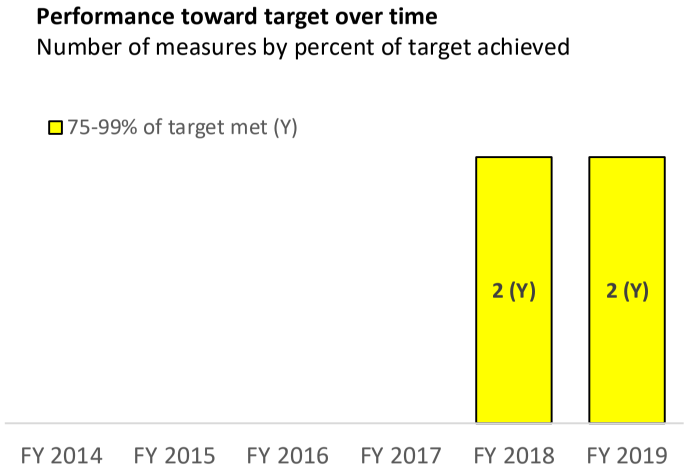
Goal 1 at a Glance

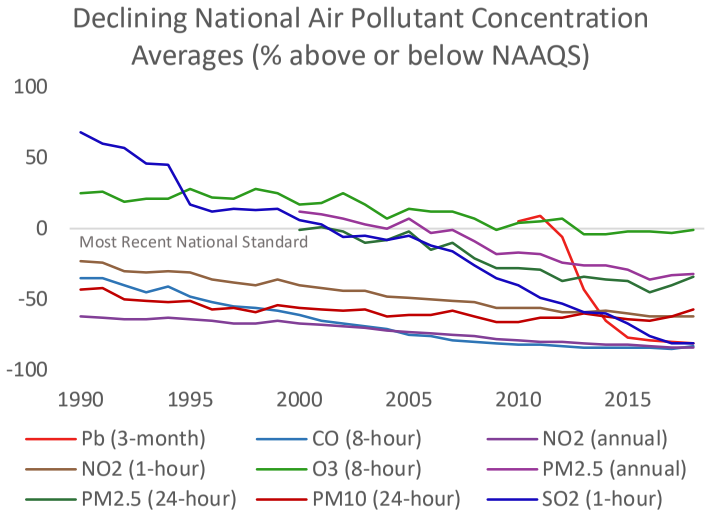
A Cleaner, Healthier Environment: Deliver a cleaner, safer, and healthier environment for all Americans and future generations by carrying out the Agency's core mission.





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.





Summary of progress toward strategic objective:

- Redesignated 12 areas to attainment for various National Ambient Air Quality Standards (NAAQS). Also took final action to redesignate four additional areas with effective dates that occurred in October 2019. EPA is on track to meet its long-term performance goal of 101 by FY 2022.
- For the 2016-2018 period, 80% of monitored counties in the U.S. met the 2015 ozone NAAQS, and 98% of monitored counties met the 2010 sulfur dioxide (SO2) NAAQS.
- Took timely action on State Implementation Plans (SIPs) consistent with Clean Air Act (CAA) deadlines and reducing the SIP backlog by working closely with state and local air agencies. Acted on over 360 SIPs, 165 of which were backlogged.
- Published Air Trends Report which shows combined emissions of six key pollutants dropped by 74%, while the U.S. economy grew more than three times between 1970-2018 (see graph on the lower left).
- Issued over 4,700 certificates of conformity for engines, vehicles, and complementary pieces of equipment allowing manufacturers to enter products into commerce in the U.S.
- Issued Automotive Trends Report on new light-duty vehicle data and auto manufacturers' performance in meeting national standards; demonstrating auto manufacturers' continued innovation to increase fuel economy and reduce pollution.
- Issued 4th Diesel Emissions Reduction Act Report to Congress showing 67,300 legacy diesel vehicles replaced/retrofitted since 2008.
- Delivered a reduction of 92% in SO2 and 84% in nitrogen oxides (NOx) emissions from 1990 levels through the Acid Rain Program and reduction of 91% in SO2 and 73% in NOx from 2005 levels through the Cross-State Air Pollution Rule.
- Issued Affordable Clean Energy rule to reduce carbon dioxide (CO2) emissions while providing affordable and reliable energy; EPA expects U.S. power sector CO2 emissions to fall by up to 35% below 2005 levels resulting in annual net benefits of $120-730M.
- Submitted Final Safer Affordable Fuel-Efficient Vehicles Rule to adjust national automobile fuel economy and greenhouse gas (GHG) emissions standards.
- Launched Cleaner Trucks Initiative to further decrease NOx emissions and help communities attain NAAQS while reducing regulatory burden to industry.
- Saved approximately 370B kWh of electricity and avoided $30B in energy costs with GHG emission reductions of 290M metric tons through ENERGY STAR.

Challenges:

- While EPA is making steady and expected progress redesignating areas to NAAQS attainment, under the 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 101[5].

Annual performance goals that support this long-term performance goal:

(PM NA1) Number of Nonattainment Areas.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					155	138	132	121	Nonattain-ment Areas	Below Target	
Actual	190	182	176	166	159	147					

Key Takeaways:

- In FY 2019, EPA took final action on state requests to redesignate 16 nonattainment areas to attainment. The effective date for 12 of these areas occurred in FY 2019, and the effective date for four of those areas occurred in the first month of FY 2020.
- The original FY 2019 target of 138 was based on projections that were made prior to FY 2018. Based on additional analysis and discussions EPA held with air agencies, EPA expected to reach 146 remaining areas at the end of FY 2019.
- 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.
- Looking ahead, EPA will: (1) work with states to update FY 2020-2022 nonattainment area projections to identify which states intend to submit approvable redesignation requests; and (2) continue to encourage states with nonattainment areas that are eligible for redesignation to attainment to develop and submit approvable redesignation requests and accompanying 10-year maintenance plans, as required by the CAA.

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 a 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. This measure tracked progress toward a FY 2018-2019 Agency Priority Goal (APG) and tracks progress toward a FY 2020-2021 APG.

[5] The baseline is 166 nonattainment areas as of 10/1/2017.

(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.

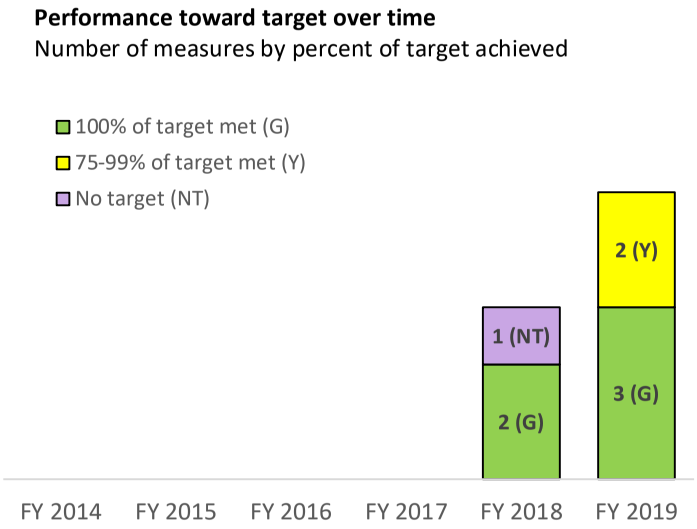
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					5,200	5,000	5,000	5,000	Certificates	Above Target	
Actual	4,225	4,360	4,453	5,109	4,869	4,711					

Key Takeaways:

- The total number of certificates issued by EPA in FY 2019 was 158 less than in FY 2018 (when 4,869 certificates were issued) and reflects approximately 70 fewer manufacturer applications for certification.
- EPA strives to issue vehicle and engine certificates of conformity in a timely manner and in pace with the numbers of requests received.

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 dictated by the product planning of manufacturers and will fluctuate from year to year.

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.



Summary of progress toward strategic objective:

- Developed and issued EPA's comprehensive cross-agency Per- and Polyfluoroalkyl Substances (PFAS) Action Plan (https://www.epa.gov/sites/production/files/2019-02/documents/pfas_action_plan_021319_508compliant_1.pdf) to help states and communities address these emerging threats and protect the nation's drinking water.
- Continued implementation of the Federal Lead Action Plan (https://www.epa.gov/sites/production/files/2018-12/documents/fedactionplan_lead_final.pdf), including release of the State Lead Testing in School and Child Care Program Drinking Water Testing Grant implementation document describing requirements for states and territories.
- The Agency also proposed revisions to the Lead and Copper Rule.
- Successfully met $8 billion target for non-federal dollars leveraged by EPA water infrastructure finance programs. The Water Infrastructure Finance and Innovation Act (WIFIA) Program closed nine transactions for over $2.5 billion in loans to help finance nearly $6 billion in water infrastructure projects and create over 10,000 jobs.
- Reduced the backlog of new National Pollution Discharge Elimination System (NPDES) permit applications from 63 to 26, a 59% reduction, and reduced the backlog of NPDES permit renewals from 456 to 373, an 18% reduction.
- Reduced the number of square miles of watershed areas that contained impaired waters in 2018 by over 12,700 square miles.

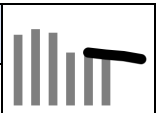
Challenges:

- Nutrient pollution and Harmful Algal Blooms continue to be a challenge. EPA is taking a multi-faceted approach to address nutrients, including coordination with U.S. Department of Agriculture on market-based approaches; efforts on affordable livestock manure recycling technology; a new water quality trading policy memorandum; Hypoxia Task Force investments in the Mississippi River/Atchafalaya River Basin; and workshops for state permit writers.
- The number of drinking water systems out of compliance with health-based standards increased in FY 2019 due to noncompliance with newer requirements. In addition to aging infrastructure, degredation of sources of drinking water, extreme weather events and accidental and intentional incidents continue to challenge drinking water systems.
- Drinking water systems, especially small systems, often have limited technical expertise to address operational issues. This contributes to violations for disinfection byproducts, which could result in lead in the distribution system.

Long-Term Performance Goal - By September 30, 2022, reduce the number of community water systems out of compliance with health-based standards to 2,700[6].

Annual performance goal that supports this long-term performance goal:

(PM DW-01) Community water systems out of compliance with health-based standards.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					3,510	3,380	3,280	3,060	CWSs	Below Target	
Actual	4,682	5,050	4,817	3,508	3,480	3,547					

Key Takeaways:

- Over 93% of the population served by community water systems (CWSs) received drinking water that meets all health-based standards.
- While over 50% (1,982/3,508) of the systems out of compliance in FY 2017 returned to compliance as of September 2019, the total number of CWSs with a health-based violation increased to 3,547 in FY 2019 due to new violations of the Stage 2 Disinfection By-Product Rule, Ground Water Rule, and Revised Total Coliform Rule.
- To address compliance challenges, EPA continues to implement countermeasures such as conducting trainings for states and systems, conducting file reviews at the state to help states make accurate compliance determination, and providing technical assistance to state staff to address compliance problems.
- EPA, in addition to providing Public Water System Supervision grants to all states, is dedicating additional resources in Regions 6 and 7 whose states comprise 36% of the national noncompliance of health-based violations. EPA will use these resources to address the underlying compliance challenges in these states by providing direct technical assistance to systems in violation.

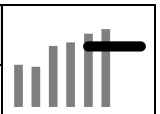
Metric Details: This measure tracks CWSs out of compliance with the health-based National Primary Drinking Water Regulations (Maximum Contaminant Level or treatment technique) during any part of the year. A CWS is a public water system that supplies water to the same population year-round. There are 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).

[6] 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)[7].

Annual performance goal that supports this long-term performance goal:

(PM INFRA-01) Number of non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).

	FY 2014	FY 2015	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 Dollars	Above Target	
Actual	5.6	5.3	8.1	8.6	9.7	10.3					

Key Takeaways:

- In FY 2019, EPA leveraged more than $10.3 billion in non-federal dollars, increasing the funds available to improve, repair and modernize the nation's water infrastructure. This exceeded the $8 billion goal and demonstrates the power of EPA's water infrastructure programs to leverage funding from non-federal resources.
- The Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF) Programs conducted final review in all 50 states and Puerto Rico. The state reviews are an opportunity for EPA to discuss national priorities with the state-run programs, including increasing the non-federal dollars leveraged by EPA water infrastructure finance programs.

Metric Details: Combined, the three primary water infrastructure programs, DWSRF, CWSRF, and WIFIA Program, represent the largest federal source of funds to address this critical component of our nation's drinking water and clean water infrastructure. 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. Targets represent annual increments needed to reach the long-term performance goal by FY 2022. This measure tracked progress toward a FY 2018-2019 Agency Priority Goal (APG) and tracks progress toward a FY 2020-2021 APG.

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[8].

Annual performance goals that support this long-term performance goal:

(PM SWP-01) Watersheds with surface waters not meeting standards (cumulative).

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	No Trend Data
Target					No Target Established	497,728	564,536	555,536	Square Miles	Below Target	
Actual					N/A	493,930					

[7] 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.)

[8] 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.)

Key Takeaways:

- Exceeded the Agency's ambitious target for reducing the square miles of watersheds with surface waters not meeting standards. Over 12,700 square miles of watershed area that contained impaired waters in FY 2018 are now meeting water quality standards.
- Improvements in EPA's Assessment, Total Maximum Daily Load (TMDL) Tracking and Implementation System (ATTAINS) allowed states to submit their integrated reports electronically and allowed EPA to automatically compile water quality data.

Metric Details: Beginning in FY 2020, this measure tracks the progress of 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. Progress will be evident by a downward trend in previously impaired waters attaining water quality standards. Water quality standards attainment means that (1) the impairments have been effectively removed; 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 to EPA their Integrated Report every two years, which includes information on the status of their waters, and state geospatial data are used to calculate results.

(PM SWP-02) Watersheds with surface waters not meeting standards because of nutrients (square miles).

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	No Trend Data
Target								192,096	Square Miles	Below Target	
Actual											

Metric Details: This measure tracks the reduction in the baseline of 202,096 square miles of waters identified as impaired due to nutrients in a state Integrated Report as of August 30, 2019. Progress will be evident by a downward trend in previously impaired waters now attaining water quality standards. Water quality standards attainment means that (1) the impairments have been effectively removed; and (2) the waterbody now either fully supports the use or meets the water quality criterion for nutrients 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. There is no FY 2020 target because this is a new measure in FY 2021.

(PM TMDL-02) Percentage of priority TMDLs, alternative restoration plans, and protection approaches in place.

	FY 2014	FY 2015	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					
Numerator			8,822	14,045	33,194	48,544			Square Miles		
Denominator			101,141	99,424	99,415	94,806					

Key Takeaways:

- In FY 2019, 42 of 56 states and territories updated their long-term Clean Water Act (CWA) Section 303(d) Program vision priorities to better reflect shifting water quality needs and goals.
- In FY 2019, EPA continued to improve ATTAINS in order to automatically track and calculate alternative restoration or protection plan in place.

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. EPA does not expect the universe of waters associated with these long-term priorities to substantially change from FY 2016 to FY 2022. However, the Agency recognizes that some adjustments may be needed due to unforeseen circumstances or planning processes.

(PM NPDES-03) Number of existing EPA-issued NPDES permits in backlog.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	No Trend Data
Target						360	280	200	Permits	Below Target	
Actual					456	373					

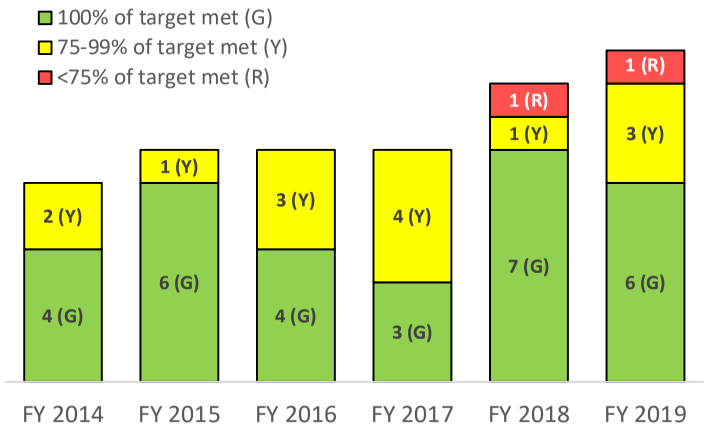
Key Takeaways:

- EPA reduced its backlog of existing NPDES permits by 18% in FY 2019, narrowly missing the target, and by 32% from the high point in May 2018.
- Improving the timing for issuance and reissuance of NPDES permits provides greater certainty for the regulated community and ensures that permits reflect the most up-to-date requirements and scientific information to protect water quality across the nation.
- Business process improvements implemented in FY 2019 will facilitate reduction of the backlog and help the Program meet ambitious future year goals.

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. The CWA limits the length of NPDES permits to five years. However, a permit can be administratively continued if the facility has submitted an application for reissuance and EPA does not renew the permit before its expiration date through no fault of the permittee. This means that 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 or denial). 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



Summary of progress toward strategic objective:

- The Superfund Task Force released its final report (https://www.epa.gov/superfund/superfund-task-force-recommendations-and-accomplishments) in September 2019. Over the past two years, EPA used the Task Force recommendations to accelerate Superfund cleanups, to expedite reuse and to institutionalize Task Force-related performance measures and lessons learned.
- Awarded more than $110 million in grants to brownfields communities. Leveraged $2.287 billion and 13,476 jobs through assessment, cleanup and redevelopment.
- In FY 2019, EPA successfully made sites Ready for Anticipated Use (RAU) under its cleanup programs: 48 Superfund site-wide RAU; 910 brownfields RAU; 127 Resource Conservation and Recovery Act (RCRA) RAU; 8,358 Leaking Underground Storage Tanks (LUST) RAU.

Challenges:

- Complex environmental problems, such as the presence or perceived presence of hazardous substances in soil, sediment and groundwater, persist at many contaminated properties, and their actual or perceived presence can threaten the health of American families and hamper economic redevelopment.
- The potential risks of reduced capacity for federal, state, tribal and local environmental land and emergency management programs drives EPA to develop operational improvements to increase effectiveness and efficiency. In FY 2019, the Agency used the EPA Lean Management System (ELMS) to target opportunities for progress and used measurement and collaboration to deliver continuous improvement; through ELMS, EPA addressed more than 25 different processes supporting cleanup programs.
- EPA's ambitious 11,200 end-of-year target for the number of LUST sites that meet risk-based standards for human exposure and groundwater migration has proven especially challenging. EPA has intensively engaged state partners to identify long-term strategies to meet the long-term performance goal by FY 2022. In FY 2019, LUST cleanups increased to 8,358 representing the first annual increase in such cleanups since FY 2013.
- Emerging contaminants present EPA with strategic risks, which can be a factor delaying cleanup timelines. To address these risks, EPA is applying developing science to update its sampling, analytic methods and guidance, as appropriate. The Agency also is implementing its Per- and Polyfluoroalkyl Substances (PFAS) Action Plan, which includes actions to: undertake rulemaking to designate and perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) as hazardous substances, develop sampling and analytic methods on various PFAS analytes, and understand those analytes' toxic effects.

Long-Term Performance Goal - By September 30, 2022, make 255 additional Superfund sites ready for anticipated use (RAU) site-wide[9].

Annual performance goals that support this long-term performance goal:

(PM S10) Number of Superfund sites made ready for anticipated use site-wide.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target	55	45	45	45	51	51	51	51	Sites	Above Target	
Actual	45	45	41	43	51	48					

Key Takeaways:

- In FY 2018-2019, the cumulative total number of Superfund sites achieving site-wide RAU was 99, an accomplishment representing 97% of the two-year goal of 102 sites.
- By the end of FY 2019, EPA had designated 935 Superfund sites as having achieved site-wide RAU.
- A government funding lapse delayed work at sites.
- The Superfund Task Force released its final report in September 2019. To ensure integration of Task Force programmatic changes, EPA identified 15 performance metrics by which the Agency will evaluate its progress in implementing Task Force-related lessons learned.

Metric Details: The sitewide ready for anticipated use (SWRAU) measure tracks EPA's progress in cleaning up and preparing Superfund sites for reuse (both private and federal facility), while 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 [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 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, since FY 2014, non-NPL sites with SAA agreements. EPA's universe of sites that have met the SWRAU criteria has a net total of 935 sites, including 923 final and deleted NPL sites and 12 non-NPL sites with SAA agreements in place. As of the end of FY 2019 there were 1,338 final NPL sites and 48 non-NPL sites with active SAA agreements. Targets represent annual increments needed to reach the long-term performance goal by FY 2022. This measure tracked progress toward a FY 2018-2019 Agency Priority Goal (APG) and tracks progress toward a FY 2020-2021 APG.

(PM 170) Number of remedial action projects completed at Superfund sites.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target	115	105	105	105	95	95	80	80	Projects	Above Target	
Actual	115	104	105	97	87	89					

Key Takeaways:

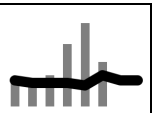
- The performance results reflect a variety of challenges, including the universe of remaining sites' complexity, emerging contaminants and changing screening/toxicity values.
- More than 68% of remedial action project completions (RAPCs) over the last five years were federal facility and Potentially Responsible Party (PRP)-lead projects; EPA is dependent on remedial action work performed by third parties at these sites. Also, over the last five years EPA-funded teams performed work on more than 31% of RAPCs.

[9] By the end of FY 2017, 836 Superfund sites had been made RAU site-wide.

- Challenges include limited construction seasons, reduced work force (attrition), uncertain remedial action funding and unpredictable weather-related events/disasters (e.g., hurricanes, fires).
- EPA updated the FY 2018 actual from 86 to 87, due to a data correction.

Metric Details: 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 regional RAPC data in SEMS.

(PM 151) Number of Superfund sites with human exposures brought under control.

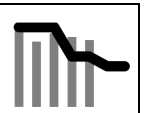
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target	10	9	9	9	8	12	10	10	Sites	Above Target	
Actual	9	10	12	24	32	17					

Key Takeaways:

- Pursuant to Superfund Task Force recommendations, EPA maintained an elevated national emphasis on sites where human exposure was not under control; the Task Force's attention on these sites contributed to FY 2019 achievements.

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. It is important to note that fiscal year 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.

(PM 137) Number of Superfund removals completed.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target		275	275	275	175	175	141	141	Removals	Above Target	
Actual		278	226	255	242	233					

Key Takeaways:

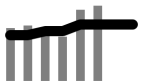
- EPA responds to threats as they arise; targets reflect best professional estimates.
- The experience and expertise of EPA's On-Scene Coordinators allows the Agency to quickly and effectively respond to emergencies as they occur.

Metric Details: This measure is a tabulation of 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 RAU[10].

Annual performance goals that support this long-term performance goal:

(PM B30) Number of brownfields sites made ready for anticipated use.

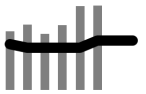
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target	550	550	600	600	684	684	684	684	Sites	Above Target	
Actual	639	668	547	531	861	910					

Key Takeaways:

- In FY 2018-2019, the cumulative total for brownfields RAU was 1,771 sites, which is 133% of the two-year APG of 1,368 sites.
- From FY 2006 through FY 2019, 7,741 brownfields properties/sites were made RAU. EPA continued a data cleanup initiative that allowed the Agency to exceed this year's target. This initiative reduced the data backlog and will ensure timely reporting of future data.
- Results are dependent on many factors outside of EPA's control, and are influenced by market conditions and community decisions.

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 is expected to result in additional sites available for productive reuse, while also helping to quantify the impact of funding from EPA's Brownfields Program. Targets represent annual increments needed to reach the long-term performance goal by FY 2022. This measure tracked progress toward a FY 2018-2019 APG and tracks progress toward a FY 2020-2021 APG.

(PM B37) Billions of dollars of cleanup and redevelopment funds leveraged at brownfields sites.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target	1.2	1.1	1.1	1.1	1.1	1.3	1.3	1.3	Billions of Dollars	Above Target	
Actual	1.54	1.71	1.47	1.7	2.2	2.3					

Key Takeaways:

- EPA continued a data cleanup initiative that allowed the Agency to exceed this year's target. This initiative reduced the data backlog and will ensure timely reporting of future data.
- Results are dependent on many factors outside of EPA's control, and are influenced by market conditions and community decisions

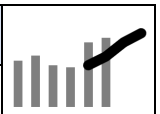
Metric Details: This measure tracks the number of additional dollars leveraged by assessment or cleanup activities conducted with EPA brownfields funding, as reported by cooperative agreement recipients at a specific property into the ACRES database.

[10] 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 RAU[11].

Annual performance goals that support this long-term performance goal:

(PM RSRAU) Number of RCRA corrective action facilities made ready for anticipated use.

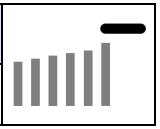
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					75	91	117	133	Facilities	Above Target	
Actual	84	93	75	72	117	127					

Key Takeaways:

- In FY 2018-2019, the cumulative total for RCRA RAU was 244 sites, which is 147% of the two-year goal of 166 sites.
- EPA exceeded the target through improved data processing for previously unlogged sites.
- By the end of FY 2019, 1,476 RCRA corrective action facilities had been made RAU site-wide.

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. Targets represent annual increments needed to reach the long-term performance goal by FY 2022. EPA increased the FY 2020 target from 107 to 117 based on recent results.

(PM CA5RC) Number of RCRA corrective action facilities with final remedies constructed.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target						98	98	98	Facilities	Above Target	
Actual	56	60	64	67	70	80					

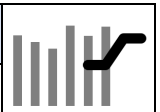
Key Takeaways:

- EPA made progress in FY 2018 and FY 2019 by applying Lean improvements to the RCRA Facilities Investigation (RFI) and Remedy Selection processes.
- EPA did miss its ambitious target for FY2019. As part of the ELMS process, EPA is working to develop regional strategies to address process issues and share lessons learned.

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 RCRAInfo by authorized states and/or EPA regional offices overseeing cleanups. This measure tracks a mid-term step in the progression toward completing facility cleanup.

[11] 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 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					64	64	105	105	Facilities	Above Target	
Actual	110	100	89	125	109	124					

Key Takeaways:

- EPA achieved 124 permit renewals which was 194% the FY 2019 target of 64.
- At the end of FY 2019, 992 (74%) of a universe of 1,330 permitted facilities had up-to-date permits.

Metric Details: This measure tracks RCRA hazardous waste permit renewals 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. Maintaining up-to-date permits ensures that permitted facilities have consistent and protective standards to prevent release. Proper standards for waste management can protect human health, prevent land contamination/degradation and other releases, and avoid future cleanups and associated costs. EPA increased its FY 2020 target from 64 to 105 as a result of efficiencies implemented. For example, EPA used Lean tools and ELMS to focus on reducing the permit backlog. As a result, some states and regions adopted new practices, such as pre-application meetings and earlier application deadlines, that led to permitting program efficiencies.

(PM RFW) Number of stakeholder actions taken to increase recycling and reduce food loss and waste.

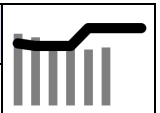
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	No Trend Data
Target								9,750	Actions	Above Target	
Actual											

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. There is no FY 2020 target because this is a new measure in FY 2021.

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 migration[12].

Annual performance goal that supports this long-term performance goal:

(PM 112) Number of LUST cleanups completed that meet risk-based standards for human exposure and groundwater migration.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target	9,000	8,600	8,600	8,600	11,200	11,200	11,200	11,200	Cleanups	Above Target	
Actual	10,393	9,869	8,977	8,775	8,128	8,358					

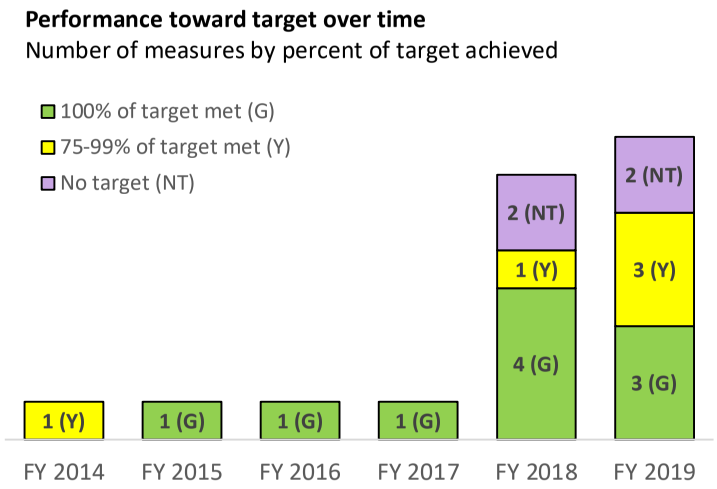
Key Takeaways:

- In FY 2018-2019, the cumulative total for LUST RAU was 16,486 sites, which is 74% of the two-year APG of 22,400 sites.
- The annual trend is increasing for the first time in six years; the last time the Agency saw an increase in cleanups from one year to the next was FY 2013.
- By the end of FY 2019, a total of 493,589 LUST cleanups had been completed, out of a cumulative universe of 550,897 confirmed releases. The national number of cleanups completed is at 90% of total identified releases since the beginning of the Program in 1988. In FY 2019, the cleanup backlog dropped from 64,093 to 57,308.
- As part of ELMS, EPA is working with the states to develop strategies to address issues regarding cleanup progress. The significant increase in backlog reduction is due to state data cleanup efforts in addition to strategies to increase cleanups.
- As the universe of available cleanups decreases, many of the remaining releases are ones with greater challenges such as a lack of responsible party, technically difficult cleanups, or lack of available funds.

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. 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. Targets represent annual increments needed to reach the long-term performance goal by FY 2022.

[12] 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.



Summary of progress toward strategic objective:

- EPA continues to make progress toward all long-term performance goals, with key milestones achieved or in progress for TSCA chemical risk evaluations and risk management actions, and continued improvement on timely completion of pre-manufacture notice final determinations.
- Released the first major update to the TSCA Inventory in 40 years.
- Released draft risk evaluations for four of the 10 chemicals on the initial priority list; all 10 evaluations are expected to be finalized in FY 2020.
- Released for public comment the proposed designations of 20 high-priority chemicals for risk evaluation (along with 20 low-priority chemicals that will not be evaluated at this time); final designations are expected in FY 2020.
- Issued a proposed rule covering five Persistent, Bioaccumulative and Toxic (PBT) chemicals and is on track to issue the final rule by the statutory deadline of December 2020.
- Improved timeliness of pre-manufacture notice final determinations (78% completed within 90 days), while continuing to complete all final determinations within timeframes allowable by statute.
- Exceeded the annual target for both the number of Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)-mandated decisions completed and the number of draft risk assessments completed (completed 80 decisions, target is 75; completed 85 registration review draft risk assessments, target is 72).

Challenges:

- The new chemical review process under amended TSCA is complex, and the chemical risk evaluation process requirements are rigorous and data-intensive. EPA continues to apply findings from its FY 2018 and FY 2019 Lean activities—e.g., introducing further IT enhancements, recruiting and training additional staff. Given the positive year-over-year trend, EPA expects to meet its long-term performance goal by FY 2022.
- EPA fell short of the annual targets for reducing the Pesticide Registration Improvement Act (PRIA) registration decision timeframe (result of 686 days, target is 631) and percentage of PRIA decisions (registration actions) completed on time (result of 97.6%, target is 99%). EPA will focus on front-end processing of PRIA applications and the conventional new active ingredient process to reduce decision timeframes for new active ingredients.

Long-Term Performance Goal - By September 30, 2022, complete all EPA-initiated TSCA risk evaluations for existing chemicals in accordance with statutory timelines[13].

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 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	No Trend Data
Target					No Target Established	N/A	10	N/A	Evaluations	Above Target	
Actual				0	N/A	N/A					

Key Takeaways:

- EPA continues to make progress toward the long-term performance goal, with key milestones achieved or in progress. EPA released draft risk evaluations for four of the 10 chemicals on the initial priority list (Pigment Violet-29, 1,4-Dioxane, Cyclic Aliphatic Bromide Cluster [HBCD], 1-Bromopropane), with all 10 evaluations expected to be finalized in FY 2020.
- EPA also released for public comment proposed designations of 20 additional high-priority chemicals for risk evaluation (along with 20 low-priority chemicals that will not be evaluated at this time); the final designations are expected in FY 2020.

Metric Details: This measure tracks new risk evaluation activity under TSCA, as amended in 2016 by the Frank R. Lautenberg Chemical Safety for the 21st Century Act. A risk evaluation is considered complete when the final risk evaluation is published in the Federal Register. The risk evaluation process is the second step, following prioritization and before risk management, in EPA's existing chemical process under TSCA. 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. 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 Program is operating under new statutory authority. EPA will initiate the next set of 20 risk evaluations in FY 2020 to be completed within the timeframe of three and a half years as anticipated by statute. FY 2019 and FY 2021 have targets of Not Applicable because there are no statutory deadlines in those years. This measure tracked progress toward a FY 2018-2019 Agency Priority Goal.

Long-Term Performance Goal - By September 30, 2022, complete all TSCA risk management actions for existing chemicals in accordance with statutory timelines[14].

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 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	No Trend Data
Target					No Target Established	N/A	N/A	1	Actions	Above Target	
Actual				0	N/A	N/A					

[13] There is no baseline for this measure, as the program is operating under new statutory authority.
[14] There is no baseline for this measure, as the program is operating under new statutory authority.

Key Takeaways:

- EPA is on track to meet the long-term performance goal by FY 2022, with key milestones achieved or in progress. EPA issued a proposed rule covering five Persistent, Bioaccumulative and Toxic (PBT) chemicals, with the final rule expected by the statutory deadline of December 2020.

Metric Details: This measure tracks the number of risk management actions completed within statutory limits under TSCA, as amended by the Lautenberg Act. Risk management actions are defined under TSCA as amended as actions to address certain PBT chemicals and to address risks from existing chemicals following risk evaluation. Statute requires EPA to propose a rule under TSCA Section 6 for certain PBT chemicals by June 21, 2019 (in FY 2019), with a final rule to be issued by December 21, 2020 (in FY 2021). For risk management actions following identification of unreasonable risk to human health or the environment in a risk evaluation, final risk management actions must be completed within two years after publication of the final risk evaluation. While the statute allows for a two-year extension, this measure tracks performance against the initial deadline only. This measure also encompasses TSCA risk management actions completed for other reasons, such as to address risks from exposure to chemicals for which risk assessments were completed prior to enactment of the Lautenberg Act. The baseline is zero in FY 2017, as the Program is operating under new statutory authority. FY 2019 and FY 2020 have targets of Not Applicable because there are no statutory deadlines in those years. This measure tracked progress toward a FY 2018-2019 APG.

Long-Term Performance Goal - By September 30, 2022, complete all TSCA pre-manufacture notice final determinations in accordance with statutory timelines[15].

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 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					65	80	80	80	Percent	Above Target	
Actual					58.4	78					
Numerator					45	103			Final Determinations		
Denominator					77	132					

Key Takeaways:

- Although substantially improved from FY 2018, performance in FY 2019 was two percent below EPA's annual target of 80 percent. Contributing factors included frequent submitter requests for suspensions of review to provide additional information or amendments, increased complexity of review process under amended TSCA, and continuing need for recruitment and training of new staff. EPA expects improvement by applying findings from the Lean activities completed in FY 2018 and FY 2019, introducing further IT enhancements, and bringing additional staff on board. Given the positive year-over-year trend, EPA expects to meet long-term performance goal.

Metric Details: This measure tracks a subset of EPA's new chemicals review activity under TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act – the review of Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices (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. 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. This measure tracks final determinations for submissions received by EPA in that fiscal year. Additional information and statistics about the New Chemicals

[15] 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.)

Program are available at: https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/statistics-new-chemicals-review. This measure tracked progress toward a FY 2018-2019 APG.

(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 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target						100	100	100	Percent	Above Target	
Actual				100	100	100					
Numerator				567	292	429			Final Determinations		
Denominator				567	292	429					

Key Takeaways:

- EPA continues to maintain its perfect record of completing all final determinations within the timeframes allowable by statute, including instances when EPA agreed to grant voluntary suspensions at the request of a submitter.

Metric Details: This measure tracks a subset of EPA's new chemicals review activity under TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act – the review of Pre-Manufacture Notices, Significant New Use Notices and Microbial Commercial Activity Notices (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 at the request of a submitter; these provide additional time to complete the required review pending receipt of additional information that is needed. 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 period of review agreed to. 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 program[16].

Annual performance goals that support this long-term performance goal:

(PM FIFRA1) Number of FIFRA decisions completed through pesticides registration review.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					58	75	110	110	Decisions	Above Target	
Actual	22	33	41	56	64	80					

Key Takeaways:

- EPA efficiently and effectively managed resources and transparently employed rigorous scientific and policy approaches, as well as grouping the nine acetolactate synthase (ALS)-inhibiting herbicides into one single decision, while remaining consistent with statutory mandates.

[16] 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.)

- EPA updated the FY 2018 actual from 65 to 64, due to a data correction.

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 "unreasonable adverse effects on man or the environment." FIFRA defines unreasonable adverse effects as "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 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					70	72	80	85	Risk Assessments	Above Target	
Actual	37	59	59	76	112	85					

Key Takeaways:

- EPA streamlined a significant number of low resource risk assessments by producing qualitative assessments or focusing only on the expected areas of risk, as well as grouping the soil fumigants into one single assessment, while remaining consistent with statutory mandates.
- EPA updated the FY 2018 actual from 113 to 112, due to a data correction.

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 "unreasonable adverse effects on man or the environment." FIFRA defines unreasonable adverse effects as "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 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[17].

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 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					643	631	619	607	Days	Below Target	
Actual		627	687	638	603	686					

Key Takeaways:

- FY 2019 performance fell short of the annual target for reducing the PRIA registration decision timeframe.

[17] 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.

- The standard deviation of decision timeframes for the fourteen completions is 128 days, with some of the variability due to varying statutory timeframes for different new active ingredient PRIA categories.
- Contributing factors included: (1) three of the 14 completions had longer statutory timeframes; (2) the total number of new active ingredient completions in FY 2019 was somewhat lower than normal; and (3) 12 of the 14 completions required renegotiation of the PRIA due date, which adds time to the overall process. Reasons for the renegotiation of the PRIA due date in FY 2019 included: deficient applications; additional studies required; risk mitigation issues; public participation process; and the Federal Register Notice publication process.
- The Agency is using the EPA Lean Management System (ELMS) to focus on front end processing of PRIA applications and the conventional new active ingredient process. These activities should lead to process changes that reduce decision timeframes for new active ingredient decisions going forward.

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: 93-2,086 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 7-24 months.

(PM 091) Percentage of decisions (registration actions) completed on time (on or before PRIA or negotiated due dates).

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target	97.0	96	96	97	99	99	99	99	Percent	Above Target	
Actual	85	98.4	99	99	99.7	98					
Numerator	1,627	2,078	2,157	2,008	2,193	2,034			Decisions		
Denominator	1,919	2,111	2,174	2,026	2,199	2,085					

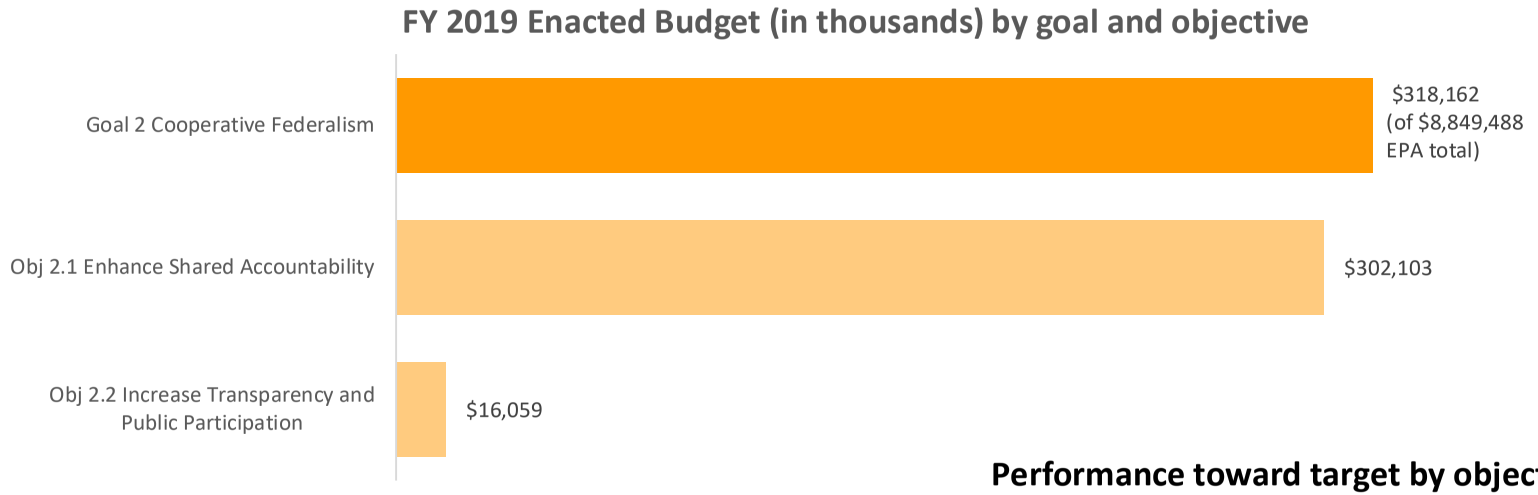
Key Takeaways:

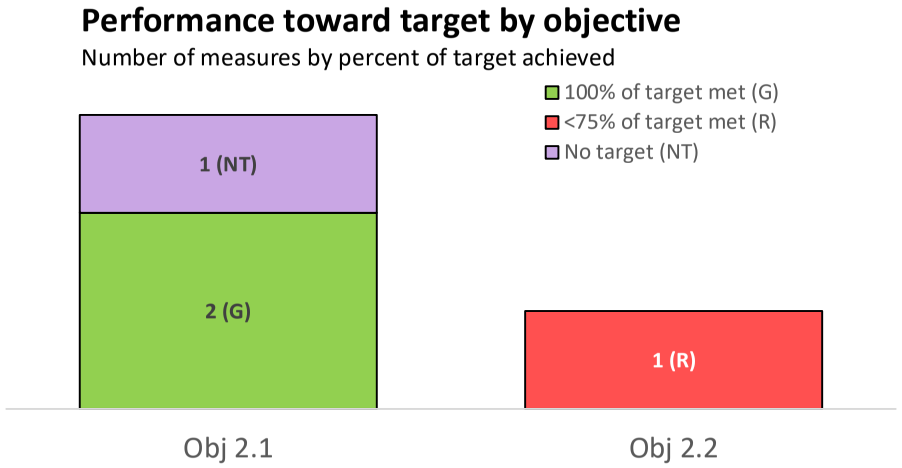
- EPA was one percent short of the annual target for percentage of PRIA decisions (registration actions) completed on time.
- EPA was not able to work on or close out actions during the lapse in government funding, nor was EPA able to initiate work on any new applications submitted during that period. EPA had to review both pending and newly-received applications when the government reopened.
- EPA will continue to monitor on-time performance on a monthly basis in FY 2020.
- Based on prior years and performance following the lapse in government funding in FY 2019, EPA expects to be able to meet the 99% on-time completion target for FY 2020.

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 on https://www.epa.gov/pria-fees/pria-overview-and-history. The baseline is 94% average of decisions completed on-time from FY 2014-2016.

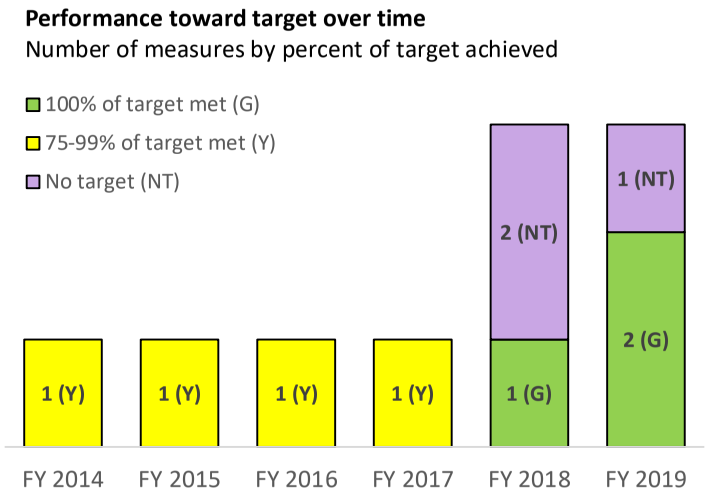
Goal 2 at a Glance

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.





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.



EPA, in consultation with the Office of Management and Budget, highlighted this objective as a focus area for improvement because of the need to clarify the Agency's statutory roles and responsibilities and to tailor state and tribal oversight to maximize EPA's return on investment and reduce burden on states and tribes, while ensuring continued progress in meeting environmental laws.

Summary of progress toward strategic objective:

- EPA is collaborating with state environmental agencies on shared governance approaches, including a national policy on the oversight of state permitting programs.
- EPA is assessing its direct implementation work in Indian Country.
- EPA is analyzing a snapshot of grant commitment data and exploring options for centralized tracking and reporting.
- As of September 30, 2019, EPA has completed 470 EPA-Tribal Environmental Plans (ETEPs). The purpose of these, and additional ETEPs under development, is to increase shared governance through joint planning that informs decisions on financial and technical assistance for environmental programs. EPA will monitor regional actions to implement ETEPs as part of its business review process.
- Completed 64 tribal consultations in FY 2019. Since 2011, EPA has completed over 500 Tribal Consultations, an important Agency milestone under the EPA Tribal Consultation Policy.
- Issued a final policy on *Enhancing Effective Partnerships Between EPA and the states in Civil Enforcement and Compliance Assurance Work*, committing to more effectively carrying out shared responsibilities with our co-regulators by improving communication, engaging in joint work planning, and recognizing the primary role of states in implementing authorized programs while also identifying circumstances where direct EPA action may be appropriate.

Challenges:

- Multiple tools are used by EPA regions to track state environmental outcomes through federal financial assistance agreements. EPA is developing a comprehensive system to track, at a national level, the activities states commit to, in their annual grants, beginning with piloting grant commitment tracking in select programs in FY 2020.
- EPA is conducting a centralized effort across program offices to establish metrics for assessing EPA direct implementation activities. EPA anticipates beginning a pilot program review of regional implementation in Indian Country in FY 2020.

Long-Term Performance Goal - By September 30, 2022, increase the number of grant commitments achieved by states, tribes, and local communities[18].

Annual performance goal that supports this long-term performance goal:

(PM ST1) Percentage of grant commitments achieved by states, tribes, and local communities.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					No Target Established	No Target Established	No Target Established	TBD	Percent	Above Target	No Trend Data
Actual					N/A	N/A					
Numerator									Commit-ments		
Denominator											

Key Takeaways:

- In FY 2019, EPA analyzed grant commitment data for a subset of the Agency's grant programs and found commitments varied, based on the diverse nature of its programs.
- In FY 2020, EPA is working with program offices to pilot a method to capture grantees' progress toward meeting the commitments established in grant agreements.

Metric Details: Grant commitments are negotiated by EPA and the state, tribal, or local grant recipient. The metric will be calculated as: number of grant commitments achieved over the total number of grant commitments for select grant programs.

Long-Term Performance Goal - By September 30, 2022, increase the use of alternative shared governance approaches to address state, tribal, and local community reviews[19].

Annual performance goal that supports this long-term performance goal:

(PM ST2) Number of alternative shared governance approaches used to address state, tribal, and local community reviews.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					No Target Established	3	20	20	Alternative Approaches	Above Target	
Actual					0	14					

Key Takeaways:

- EPA coordinated with states and tribes to develop a principles memo, outlining key tenets of shared governance. The memo aligns with the Environmental Council of the States' Cooperative Federalism principles.

[18] Universe (number of grant commitments) and FY 2021 target will be determined in FY 2020. (Footnote updated from FY 2018-2022 EPA Strategic Plan published February 12, 2018.)

[19] There is no baseline for this measure. (Footnote updated from *FY 2018-2022 EPA Strategic Plan* published February 12, 2018.)

- The Clean Water Act National Pollutant Discharge Elimination System (NPDES) and the Clean Air Act Title V operating permit programs piloted the application of this memo using program-specific templates; after seeking feedback from state partners, EPA implemented the process in all 10 of its regional offices.
- EPA continues to work with states to identify additional areas of focus and will deploy a similar process for each of these areas.

Metric Details: This measure tracks the number of program areas where EPA has launched the new oversight framework. EPA will define, develop, pilot, evaluate, and launch a comprehensive system to evaluate state and local implementation of federal environmental programs in FY 2020. Tribes are not included in the pilot at this time. The "oversight framework" is defined as the overarching principles as laid out in the principles memo (available at: https://www.epa.gov/aboutepa/andrew-wheeler-messages-epa-employees), coupled with a template populated with state-and regional specific details on the review activity in question. The purpose of this effort is twofold: to begin to standardize EPA's oversight work across EPA regions, and to maximize state and federal resources by focusing on the most important work.

Other Core Work supporting Objective 2.1

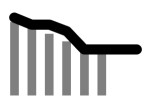
Annual performance goals:

(PM PAM1) Number of EPA actions to address international marine litter priorities.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	No Trend Data
Target								6	Actions	Above Target	
Actual											

Metric Details: This measure covers EPA's efforts to assist international environment ministries to implement tools and approaches to improve water quality, improve solid waste management and prevent marine litter in our shared oceans. Specifically, the measure will track EPA international actions that could include: facilitating local/regional projects that focus on improving waste collection practices in significant source countries, recycling, clean-up and capture; participating in/leading international multilateral fora to increase advancement of EPA policies and positions; assisting in development of marine litter action plan(s) in source countries to reduce leakage of trash to the environment; identification of steps to implement relevant and applicable waste collection and management systems; and assessment of waste flows and sharing of holistic solid waste management approaches. There is no FY 2020 target because this is a new measure in FY 2021.

(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.

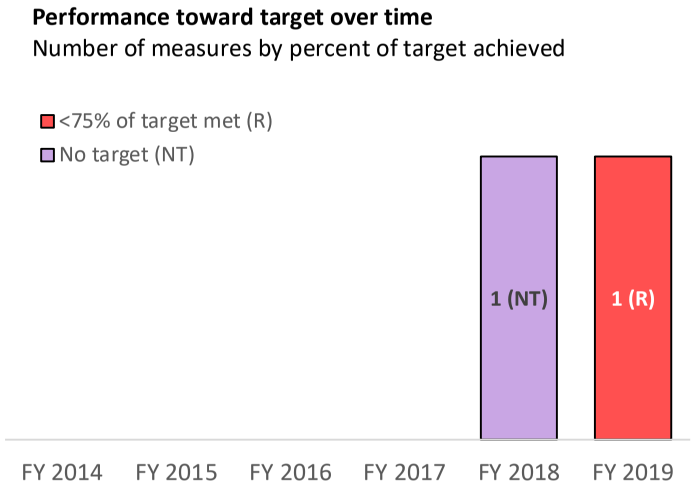
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target	17,000	15,500	15,500	14,000	10,000	10,000	10,000	10,000	Inspections & Evaluations	Above Target	
Actual	16,000	15,400	13,500	11,800	10,600	10,300					

Key Takeaways:

- EPA is using data to target its efforts so that fewer inspections are needed to find noncompliance. EPA also is continuing to expand incentives for self-audit/disclosure.
- EPA formalized its commitment to more effective partnerships and issued a final policy on *Enhancing Effective Partnerships Between the EPA and the States in Civil Enforcement and Compliance Assurance Work*, committing to more effectively carry out shared responsibilities with our co-regulators.

Metric Details: This measure description 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.

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.



EPA, in consultation with the Office of Management and Budget, highlighted this objective as a focus area for improvement due to significant challenges in responding to Freedom of Information Act (FOIA) requests.

Summary of progress toward strategic objective:

- Led the efforts of the White House Opportunity and Revitalization Council by delivering community-driven assistance in 33 communities through unique programs such as Local Foods, Local Places and Building Blocks for Community Revitalization.
- Trained more than 4,000 state level colleagues on best practices for integrating environmental justice considerations at the state level, including representatives from all 50 states, the District of Columbia, and Puerto Rico.
- Collaborated with other federal agencies to provide direct technical assistance workshops to economically distressed communities. These workshops support community-driven solutions to environmental challenges and economic decline in more than 60 communities.
- Formed a workgroup to develop effective risk communication strategies and enhance the Agency's engagement with stakeholders such as parents, other caregivers and healthcare providers regarding children's environmental health.
- Reduced the Agency's FOIA backlog by 16% from the April 2018 baseline, missing the target of 25%. EPA updated its FOIA regulations for the first time since 2002 to bring its regulations into compliance with the 2007, 2009, and 2016 statutory amendments and centralize FOIA submission to EPA's National FOIA Office. EPA enhanced its FOIA intake, review, and assignment standard operating procedures, checklists, and templates, and retrained all FOIA intake review staff, to improve consistency and accuracy in the FOIA intake and assignment process.

Challenges:

- Available staff and funding limit the number of communities EPA can serve from its assistance programs.
- EPA continued to face significant challenges in responding to FOIA requests including a significant FOIA backlog from prior years in certain offices, a substantial increase in the backlog during the lapse in government appropriations, data quality management challenges, and challenges maintaining sufficiently trained staff to process FOIA requests.

Long-Term Performance Goal - By September 30, 2022, eliminate the backlog and meet statutory deadlines for responding to Freedom of Information Act (FOIA) requests[20].

Annual performance goal that supports this long-term performance goal:

(PM FO1) Percentage reduction in overdue FOIA requests from the April 2018 baseline.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					No Target Established	25	50	75	Percent	Above Target	
Actual					-9	16					
Numerator					-224	409			Requests		
Denominator					2,537	2,537					

Key Takeaways:

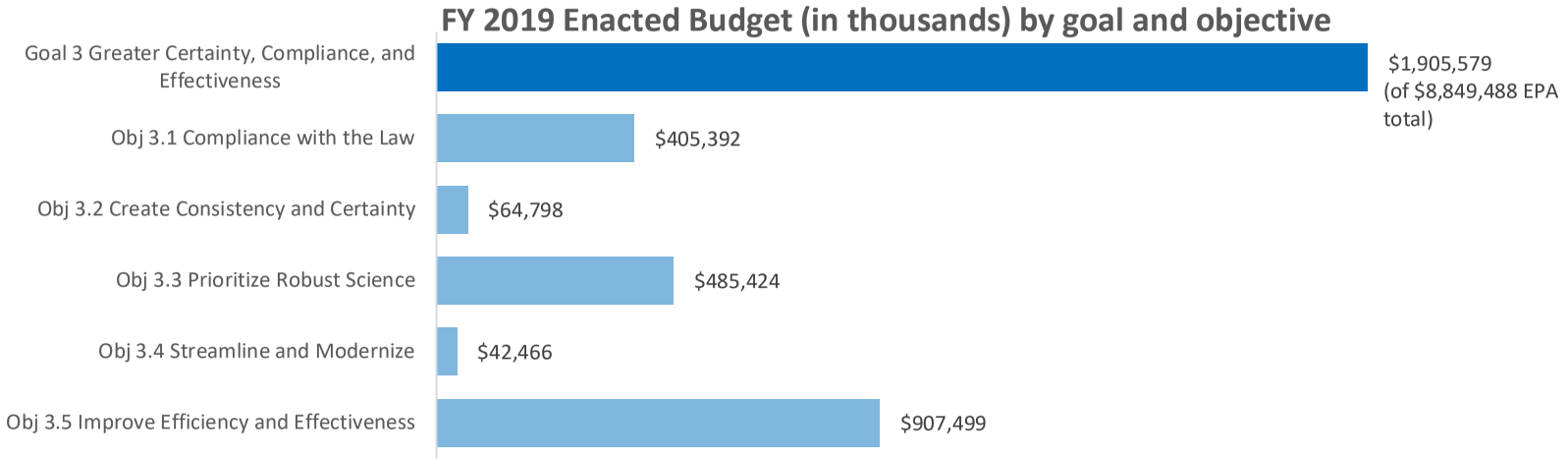
- In FY 2019, EPA made up the ground it lost in FY 2018 and reduced its FOIA backlog to 2,128 at the end of the fiscal year, 409 below the baseline that was set at 2,537 in April 2018. Even with this substantial 16% FOIA backlog reduction, EPA did not achieve its goal of reducing the backlog to 25% below the baseline. Nevertheless, the Agency made enough progress that it believes it will meet the long-term performance goal by FY 2022.
- To reduce its FOIA backlog and enhance FOIA processing, EPA completed the realignment of regional FOIA programs into the Regional Counsel Offices to create direct reporting lines to the General Counsel, who is the Agency's Chief FOIA Officer.
- EPA continued to face significant challenges in responding to FOIA requests including a significant FOIA backlog from prior years in certain offices, a substantial increase in the backlog during the lapse in government appropriations, data quality management challenges, and challenges maintaining sufficiently trained staff to process FOIA requests.
- EPA started issuing monthly backlog reports to Agency leaders displaying each program and regional office's FOIA backlog to increase transparency and accountability.
- EPA updated its FOIA regulations for the first time since 2002 to bring its regulations into compliance with the 2007, 2009, and 2016 statutory amendments and to centralize FOIA submission to EPA's National FOIA Office to streamline the initial intake review and assignment to EPA regions and program offices.
- EPA enhanced its FOIA intake, review, and assignment standard operating procedures, checklists, and templates, and retrained all FOIA intake review staff, to improve consistency and accuracy in the FOIA intake process.
- EPA completed development of and began delivering training to supervisors on their FOIA responsibilities, thereby strengthening the implementation of the FY 2019 performance appraisal requirements for all managers with FOIA responsibilities.

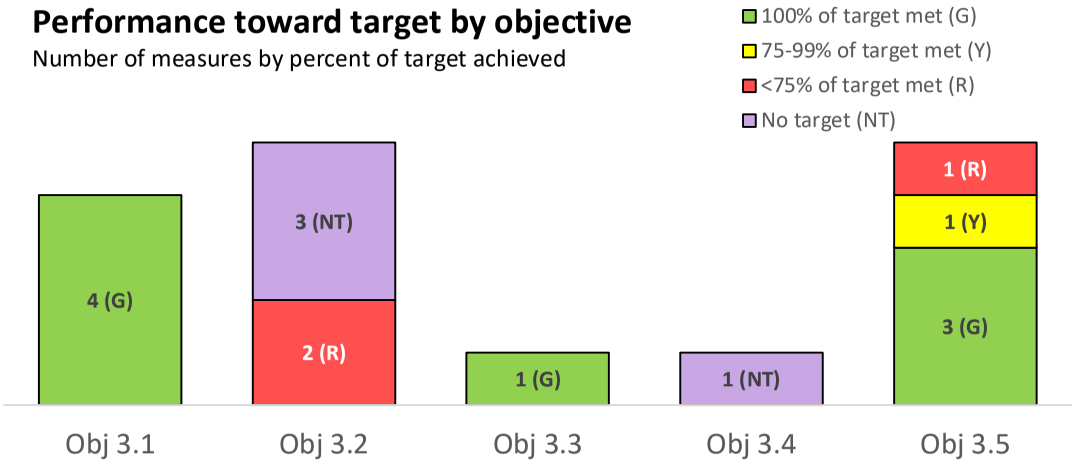
Metric Details: For purposes of this measure, overdue requests are defined as those EPA deadlines that are not indicated as closed on FOIAonline.gov after 20 working days for simple requests, 30 days for unusual circumstances, or other requestor agreed upon timeframes. EPA is focusing on reducing the 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.

[20] 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.)

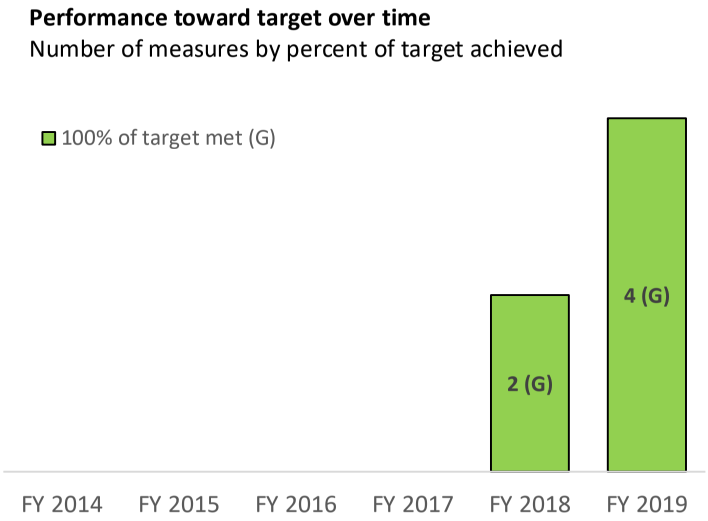
Goal 3 at a Glance

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.





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.



Summary of progress toward strategic objective:

- Selected six National Compliance Initiatives (NCIs) for the FY 2020–2023 cycle that will advance the strategic objectives in the *FY 2018-2022 EPA Strategic Plan* to improve air quality, provide for clean and safe water, ensure chemical safety, and improve compliance with our nation's environmental laws while enhancing shared accountability. The enforcement and compliance assurance program also contributes to the Agency's goal of reducing childhood lead exposures and associated health impacts as part of implementing the Federal Lead Action Plan.
- Increased the percentage of inspection reports that EPA provides to facilities within 70 days of inspection from 46% to 81%. This will speed the correction of violations.
- Reduced the rate of significant noncompliance (SNC) with Clean Water Act National Pollutant Discharge Elimination System (NPDES) permits to 25.0% from a baseline of 29.4%.
- Increased documentable EPA administrative enforcement actions/activities producing correction of violations from 74 to 184.
- The Superfund Enforcement Program secured private party commitments for cleanup and cost recovery and billed for oversight amounts totaling more than $961 million. The use of Superfund enforcement tools resulted in cleanup and redevelopment at 160 private party sites.
- EPA and California reached a settlement with Fiat Chrysler, which paid a $305M penalty and implemented a recall/mitigation program at an estimated cost of $185M for violating the Clean Air Act by installing defeat devices in more than 100,000 vehicles to lessen the effectiveness of the vehicles' emission control systems.
- Reached a settlement with New York City's Hillview Reservoir to address drinking water violations involving potential adverse human health risks posed by Cryptosporidium with injunctive relief estimated at $2.95B.

Challenges:

- EPA and states continue to find (and resolve) NPDES permit data quality issues (e.g., definition, entry, and completeness).

Long-Term Performance Goal - By September 30, 2022, reduce the average time from violation identification to correction[21].

Annual performance goal that supports this long-term performance goal:

(PM 436) Number of all referred no complaint filed (RNCF) civil judicial cases that are more than 2.5 years old.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	No Trend Data
Target						129	120	120	Cases	Below Target	
Actual						94					

Key Takeaways:

- Close cooperation between EPA headquarters and regions and with the Department of Justice ensures that cases move toward resolution at an appropriate speed. EPA is making progress to more quickly return violators to compliance.

Metric Details: This measure represents the number of all 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 in June 2018.

Long-Term Performance Goal - By September 30, 2022, increase the environmental law compliance rate[22].

Annual performance goal that supports this long-term performance goal:

(PM 432) Percentage of Clean Water Act National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					24	25.7	22.1	18.4	Percent	Below Target	
Actual					22	25.0					
Numerator					12,017	10,141			Permittees		
Denominator					53,545	40,606					

Key Takeaways:

- EPA reduced the rate of SNC of NPDES permits to 25.0% from a revised FY 2018 baseline of 29.4%.
- EPA convened a national EPA-state conference focused on reducing the rate of SNC in the NPDES Program by examining best practices being implemented in EPA regions and in states.

[21] 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.)

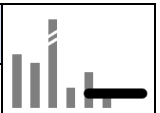
[22] This concept will be piloted by focusing initially on decreasing the percentage of Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits. Other program areas may be included in this long-term performance goal during the FY 2018-2022 timeframe. (Footnote updated from *FY 2018-2022 EPA Strategic Plan* published February 12, 2018.)

Metric Details: This purpose of this measure is to track the NPDES SNC/Category 1 noncompliance rate among individually permitted major and non-major (minor) NPDES permittees. Major and minor permittees that were in SNC/Category 1 noncompliance at any time during the year are counted in the numerator. NPDES SNC/Category 1 noncompliance identifies a specific level of violation, based on duration, severity, and type of violation. Baseline: For FY 2018, EPA estimated 24% of NPDES permittees to be in SNC. For FY 2019, EPA recalculated the baseline to be 29.4% upon discovery of facilities erroneously included in the universe of regulated permittees counted in the denominator. This measure tracked progress toward a FY 2018-2019 Agency Priority Goal.

Other Core Work supporting Objective 3.1

Annual performance goals:

(PM 434) Millions of pounds of pollutants and waste reduced, treated, or eliminated through concluded enforcement actions.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					325	325	325	325	Millions of Pounds	Above Target	
Actual	1,221	1,030	62,223	461	810	347					

Key Takeaways:

- Results exceeded target but were lower than previous years.
- The target for this measure is an estimate based on cases in development and past results. Results in any given year are dependent on actual case outcomes, which are quite variable and difficult to predict. Annual totals are often influenced by a few large cases.

Metric Details: This measure combines environmental benefits from 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.

(PM 441) Number of enforcement tools completed to address cleanup and/or long-term protection, including reuse, of contaminated sites.

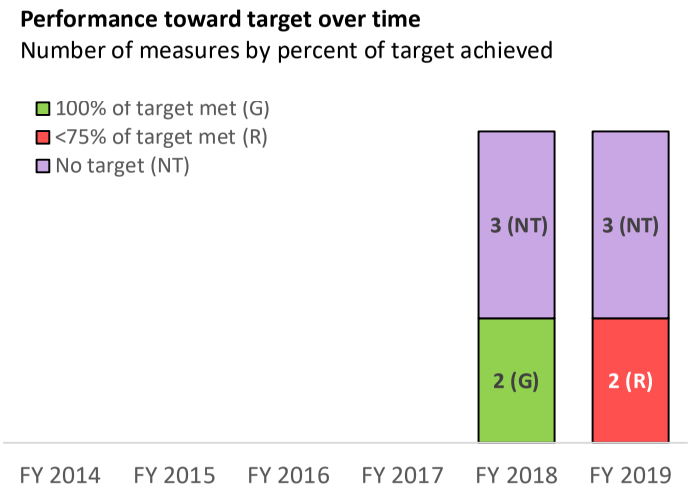
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target						170			Tools	Above Target	No Trend Data
Actual						210					

Key Takeaways:

- Superfund Task Force efforts contributed to achievement of the FY 2019 target for this measure.

Metric Details: For Superfund private sites, this measure includes: completed private party enforcement agreements for the performance of site study and cleanup; agreements that make cash payments toward future site work; cost recovery settlements with funds dedicated for future work; completed agreements with third-party prospective purchasers to help remove liability barriers to contaminated properties and facilitate redevelopment; and assurances to parties interested in cleaning up, purchasing and developing certain properties (comfort/status letter). This measure also counts Superfund Federal Facility Agreements (FFAs) and FFA amendments; Records of Decision (RODs) and ROD amendments; Explanation of Significant Differences (ESDs); and Resource Conservation and Recovery Act (RCRA) Corrective Action cleanup orders. Potentially Responsible Parties and other parties made an average of 170 commitments to perform or pay for cleanup and/or reuse of contaminated sites from FY 2014 to FY 2018. This measure is discontinued after FY 2019.

Objective 3.2 – Create Consistency and Certainty: Outline exactly what is expected of the regulated community to ensure good stewardship and positive environmental outcomes.



EPA, in consultation with the Office of Management and Budget (OMB), highlighted this objective as a focus area for improvement given the increase in reporting burden hours to the regulated community.

Summary of progress toward strategic objective:

- EPA increased reporting burden to the regulated community by 5.9 million hours, compared with a targeted reduction of 2.0 million hours.
- To reduce burden hours, EPA developed a guidance document on valuing the cost of time in Information Collection Request (ICR) burden estimates that will help with consistency of estimates.
- EPA also developed a list of the 33 ICRs that exceed 1 million hours of burden to help offices with strategic planning on burden reduction efforts.

Challenges:

- In order to significantly reduce burden hours, EPA would have to change individual regulations to reduce the information required to be collected. Regulation changes require FTE resources, extramural dollars, and years to complete and need a high degree of focused attention at the agency. EPA has more than 400 ICRs.
- EPA faced challenges meeting legal deadlines based on limited staff resources and focused on deadlines with greatest impact on state planning and environmental benefits.

Long-Term Performance Goal - By September 30, 2022, meet 100% of legal deadlines imposed on EPA.

Annual performance goal that supports this long-term performance goal:

(PM RG1) Percentage of legal deadlines met by EPA.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					No Target Established	No Target Established			Percent	Above Target	No Trend Data
Actual					N/A	N/A					
Numerator									Legal Deadlines		
Denominator											

Key Takeaways:

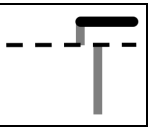
- In FY 2019, EPA began to develop a revised methodology to consider the scope for tracking this measure.

Metric Details: The methodology for this measure is under development.

Long-Term Performance Goal - By September 30, 2022, eliminate unnecessary or duplicative reporting burdens to the regulated community by 10,000,000 hours[23].

Annual performance goal that supports this long-term performance goal:

(PM RG2) Hours of unnecessary or duplicative reporting burden to the regulated community eliminated.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					2,000,000	2,000,000	2,000,000	2,000,000	Hours	Above Target	
Actual					2,026,627	-5,893,454					

Key Takeaways:

- In FY 2019, OMB approved 204 EPA actions on ICRs. Of those, 36% of actions decreased burden, 39% increased burden, and 25% represented no change.
- EPA increased net reporting burden to the regulated community by 5.9 million hours, compared with a targeted reduction of 2.0 million hours. Most of the increase was due to: (1) the microbial rules, which reflect full implementation of the Revised Total Coliform Rule (3.44 million hours); (2) a rule requiring facilities that use extremely hazardous substances to develop a Risk Management Plan (1.78 million hours); (3) a rule increasing the number of facilities subject to reporting under the Emergency Planning and Community Right-to-Know Act (1.05 million hours); and (4) revisions to the Renewable Fuels Standards (0.65 million hours).
- EPA developed a guidance document on valuing the cost of time in ICR burden estimates that will help with consistency of estimates.
- EPA also developed a list of the 33 ICRs that exceed 1,000,000 hours of burden to help offices with strategic planning on burden reduction efforts. These ICRs represent 85% of the Agency's overall burden.

[23] Baseline is estimated at 173,849,665 information collection and reporting hours as of October 2, 2017. (Footnote updated from *FY 2018-2022 EPA Strategic Plan* published February 12, 2018.)

- As of the end of FY 2019, total information collection and reporting hours were 177,716,492.

Metric Details: EPA will engage in continuous improvement for managing the paperwork burden on regulated entities associated with EPA's ICRs and reduce the burden, where possible, with a goal of eliminating 2 million hours of unnecessary or duplicative reporting per year toward the goal of 10 million hours by the end of FY 2022. Annual increments represent permanent changes in reporting burden. The data are tracked in OMB's RegInfo.gov database. Targets represent annual increments needed to reach the long-term performance goal by FY 2022.

Other Core Work supporting Objective 3.2

Annual performance goals:

(PM RG3) Number of EO 13771 regulatory actions issued.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					No Target Established	No Target Established	No Target Established	No Target Established	Actions	Above Target	
Actual					3	6					

Key Takeaways:

- EPA issued six regulatory actions and 18 deregulatory actions (see PM RG4), exceeding the Executive Order (EO) 13771 two-for-one requirement.

Metric Details: This measure is an OMB requirement based on Presidential Memorandum M-17-23 which outlines the requirements of EO 13771, including a two-for-one requirement that agencies must issue two deregulatory actions for every regulatory action issued. No targets are established per OMB guidance, but results are reported.

(PM RG4) Number of EO 13771 deregulatory actions issued.

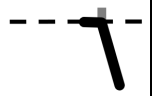
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					No Target Established	No Target Established	No Target Established	No Target Established	Actions	Above Target	
Actual					10	18					

Key Takeaways:

- EPA issued 18 deregulatory actions and six regulatory actions (see PM RG3), exceeding the EO 13771 two-for-one requirement.

Metric Details: This measure is an OMB requirement based on Presidential Memorandum M-17-23 which outlines the requirements of EO 13771, including a two-for-one requirement that agencies must issue two deregulatory actions for every regulatory action issued. No targets are established per OMB guidance, but results are reported.

(PM RG5) Total incremental cost of all EO 13771 regulatory and deregulatory actions.

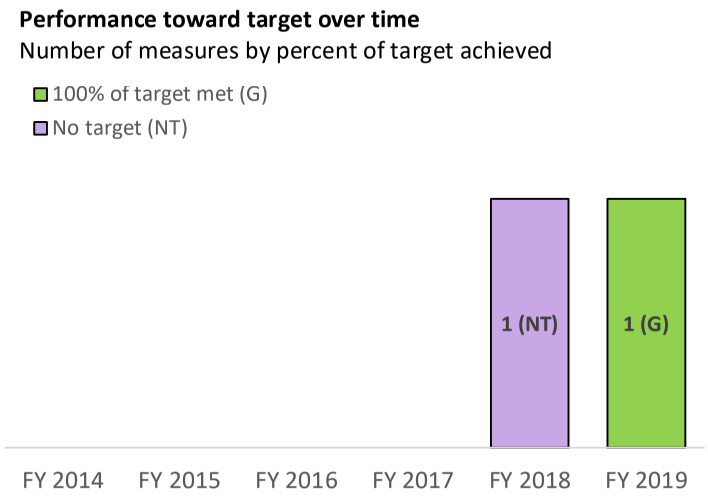
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					-40	-50	-2,138	No Target Established	Millions of Dollars	Below Target	
Actual				-22	-75	449					

Key Takeaways:

- EPA missed the FY 2019 target because some regulatory actions were delayed and some did not have the anticipated costs and savings.
- In FY 2019, EPA finalized deregulatory actions that will save the American people over $58.3 million per year in regulatory burden.

Metric Details: This measure is an OMB requirement based on Presidential Memorandum M-17-23. In FY 2017, the total incremental cost of all EO 13771 regulatory and deregulatory actions was -$21.5 million. The incremental cost values are annualized values in 2016 dollars applying a 7% discount rate, discounted to the year 2016 and assuming a perpetual time horizon. Incremental benefits are not included in this total.

Objective 3.3 – Prioritize Robust Science: Refocus the EPA's robust research and scientific analysis to inform policy making.



Summary of progress toward strategic objective:

- EPA made significant progress toward the objective of aligning its science and research portfolio with the needs of its customers, by engaging extensively internally and with other federal, state, and local stakeholders to direct research priorities and improve research translation efforts. In addition to delivering over 150 research products that met its customers' needs in FY 2019, EPA's Office of Research and Development (ORD) restructured its organization to align with core research priorities.

Challenges:

- ORD continues to face challenges in retaining expertise and sustaining the right skill mix to meet its mission. To plan for future human capital needs, ORD will continue its efforts to increase hiring efficiencies, strengthen diversity and inclusion programs, and implement leadership succession planning.
- ORD's work is threatened by aging equipment and facility infrastructure. ORD is evaluating operational efficiencies to lower costs of Agency equipment and facility management with the intention of using savings for infrastructure maintenance to improve the long-term viability of the portfolio.

Long-Term Performance Goal - By September 30, 2022, increase the percentage of research products meeting customer needs[24].

Annual performance goal that supports this long-term performance goal:

(PM RD1) Percentage of Office of Research and Development (ORD) research products meeting customer needs.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					No Target Established	77	80	82	Percent	Above Target	
Actual					77	79					
Numerator					171	154			Products		
Denominator					222	196					

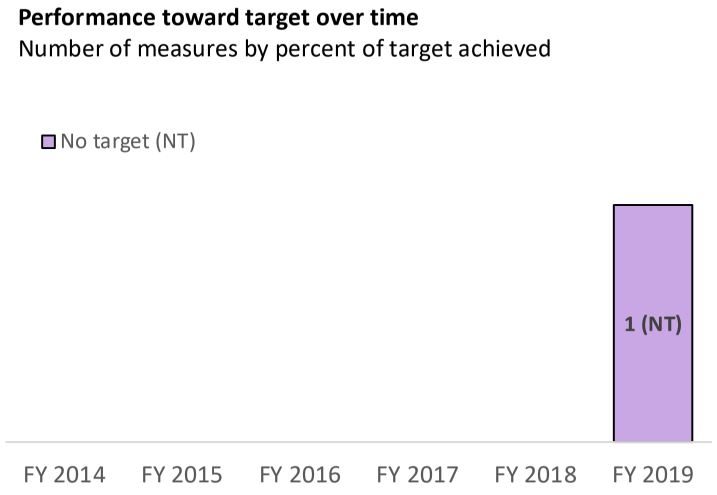
Key Takeaways:

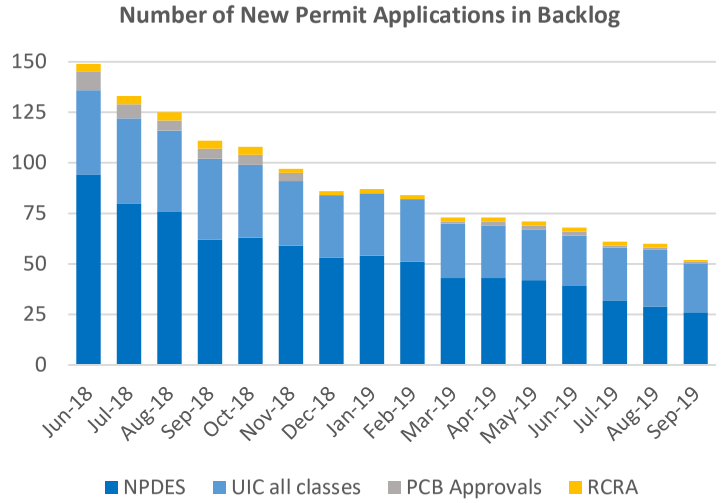
- Products delivered in FY 2019 which met customer needs included: updates to ORD's EnviroAtlas software tool which provides geospatial data on environmental stressors and other resources to the public, an updated version of the CompTox Chemicals Dashboard which integrates available information to help decision-makers and scientists quickly and efficiently evaluate thousands of chemicals, and a series of scientific and regulatory support products developed to support National Ambient Air Quality Standards programs.

Metric Details: Customer satisfaction is evaluated through a robust survey process. The survey engages approximately 200 key users of ORD products. Survey respondents evaluate the scientific rigor of research products (quality), product relevance (usability), and timeliness of product delivery. The survey results are estimated at a 90% confidence interval of ±10 products. In accordance with recommendations made by the EPA Office of the Inspector General, ORD will submit to the Office of Management and Budget an Information Collection Request (ICR) which, if approved, would allow ORD to survey more than nine non-federal external customers in future rounds of data collection.

[24] 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.





Summary of progress toward strategic objective:

- Reduced the number of permit decisions that exceed six months by 53% (see graph on the lower left). Note that these totals do not include permits with statutory timeframes longer than six months.
- Developed tools, which include a centralized system to track pending permit applications and an approach to allow the agency to deny permits based on incomplete applications, to improve permitting efficiency agencywide.
- EPA's regional offices have developed strategies and made significant shifts in resources to address the backlog of new applications. EPA's program and regional offices created standard work products for permit writers, established communities of practice, and some developed work-sharing agreements to better utilize permit writer expertise.
- To modernize permitting systems, EPA developed an electronic system to receive and collaborate with state agencies on proposed Clean Air Act (CAA) Title V operating permits. EPA expects this system, which states could use instead of the current paper-based process, to significantly improve the efficiency and timeliness of required reviews of proposed Title V permits. The Agency is also exploring the possibility of automating the Clean Water Act National Pollutant Discharge Elimination System (NPDES) permit application form.

Challenges:

- EPA's FY 2022 long term performance goal may be influenced by limited available FTE and contract resources; some permit applications may take more time due to complex issues, public interest, and required consultations.

Long-Term Performance Goal - By September 30, 2022, reach all permitting-related decisions within six months[25].

Annual performance goal that supports this long-term performance goal:

(PM PE2) Number of new permit applications in backlog.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target						No Target Established	33	0	Permits	Below Target	
Actual					111	65					

Key Takeaways:

- EPA conducted comprehensive Lean business process improvement events to streamline and optimize the Agency's key permitting programs: NPDES; Safe Drinking Water Act (SDWA) Underground Injection Control (UIC); and CAA Title V and New Source Review (NSR). The permitting programs are continuing to implement recommendations that were identified during those events.
- As part of this effort, the Agency developed a central system to track pending permit applications. Each month the Agency tracks and reports the status of pending permits (date of application receipt, date of permit decision).

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 NSR and Title V permits 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. Note that the baseline and FY 2018 actual do not include NSR or Title V permits. This measure tracked progress toward a FY 2018-2019 Agency Priority Goal (APG) and tracks progress toward a FY 2020-2021 APG.

(PM PE3) Number of existing permit applications in backlog.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	No Trend Data
Target							313	209	Permits	Below Target	
Actual						417					

Key Takeaways:

- EPA began tracking this measure in May 2019. Over the first four months, the number of existing permits in backlog decreased by 13% from 479 (as of May 31, 2019) to 417 (as of September 30, 2019).

Metric Details: This measure tracks the sum of existing permits that have passed their expiration date and are awaiting reissuance. This measure includes NPDES, UIC, RCRA, PCBs, and Title V permits. 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.

[25] 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*.)

Other Core Work supporting Objective 3.4

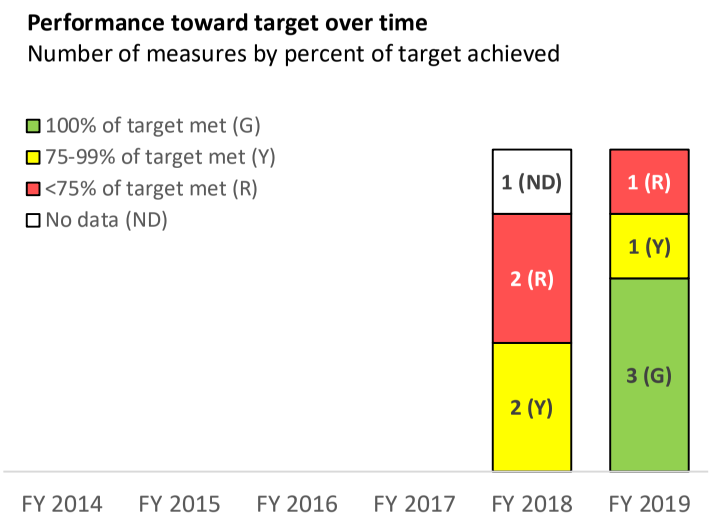
Annual performance goal

(PM OZ1) Percentage of communities receiving direct technical assistance that have Opportunity Zones.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target							60	70	Percent	Above Target	No Trend Data
Actual											
Numerator									Communities		
Denominator											

Metric Details: This measure tracks the number of communities (local governments, community organizations or regional agencies, and other locally-based stakeholders) that receive direct technical assistance from EPA's Office of Community Revitalization (OCR) programs in support of Executive Order (EO) 13853, as a percentage of the total number of communities that receive support from OCR. This assistance is offered through staff and contractor workshops delivered in partnership with community leaders, public and private sector actors, and federal, state, and local stakeholders. Opportunity Zones are defined by census tracts in economically distressed communities designated by the governors of states and territories under the Tax Cuts and Jobs Act of 2017, which established a new federal tax incentive to promote long-term investments in these areas. The purpose of EO 13853 is to facilitate investment in economically distressed communities by streamlining regulations, optimizing the use of federal resources, and stimulating economic opportunity. This is a new measure for FY 2020 and FY 2021.

Objective 3.5 – Improve Efficiency and Effectiveness: Provide proper leadership and internal operations management to ensure that the Agency is fulfilling its mission.



EPA, in consultation with the Office of Management and Budget, highlighted this objective as a focus area for improvement for the purpose of maximizing the Agency's operational efficiency.

Summary of progress toward strategic objective:

- Released 128,150 square feet of unused office and warehouse space.
- Continued headquarters consolidation work that will lead to the closure of the Potomac Yards campus by FY 2021.
- Implemented 66 process improvements, exceeding target of 50.
- Completed initial EPA Lean Management System (ELMS) deployment to 4,522 EPA staff.
- Achieved the 85% target and continued progress toward the long-term performance goal of 100% Procurement Action Lead Time (PALT) achievement by FY 2022.
- Received a clean opinion on EPA's Consolidated Financial Statements for the 20th consecutive year.
- Obligated $2.5 billion for 10 Water Infrastructure Finance Improvement Act loans, bringing the total loan amount to $3.56 billion, and processed the first loan disbursement.
- Adopted three additional shared services.

Challenges:

- Developing enterprise-wide systems and tools for current and future business needs requires significant time, balancing multiple stakeholders, and a deep understanding of complex Agency needs. It can be challenging to reach a consensus that serves all organizations but ensures that solutions will be effective in the short and long term.
- Complex and evolving threats require vigilance in cybersecurity protections. Opportunities exist in maintaining focus on the federal-government-wide Continuous Diagnostics & Mitigation (CDM) effort and EPA-specific projects that complement CDM.
- EPA has a high number of retirement-eligible staff in the next few years. EPA is leveraging recently deployed human capital management tools to ensure effective knowledge transfer and succession planning.
- Achieving the goal of improving 250 operational process by FY 2022 will require ELMS deployment to 80% of EPA's work units by FY 2020, as compared with 33% in FY 2019.
- EPA missed the target for reducing the number of Agency administrative subsystems, but is making progress to consolidate agency audit, financial management and payment tracking systems.

Long-Term Performance Goal - By September 30, 2022, reduce unused office and warehouse space by 850,641 square feet[26].

Annual performance goal that supports this long-term performance goal:

(PM FA1) Reduction in EPA Space (sq. ft. owned and leased).

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					241,000	163,626	100,821	319,693	Square Feet	Above Target	
Actual					149,278	128,150					

Key Takeaways:

- EPA is on track to meet the long-term performance goal of releasing over 850,641 square feet of space by the end of FY 2022.
- EPA missed the FY 2019 target by 35,476 square feet, largely due to the release of the Gross Ile research facility (35,000 square feet.) being pushed from FY 2019 to FY 2020 as well as logistical delays in other consolidation efforts.

Metric Details: This measure tracks usable 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.

[26] 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)[27].

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 2014	FY 2015	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	Above Target	No Trend Data
Actual					SA: 70 CP: 88 FAA: 76	85					
Numerator					SA:704 CP: 21 FAA: 3,038	9,269			Actions		
Denominator					SA: 1,007 CP: 24 FAA: 4,002	10,906					

Key Takeaways:

- EPA met the FY 2019 target and will continue to improve results to meet the long-term performance goal of 100% PALT achievement by FY 2022.
- EPA continues to leverage ELMS to identify process improvement opportunities around PALT.

Metric Details: For FY 2018, this measure tracked the timeliness of the Agency's processing of contract actions for Simplified Acquisitions (SA), Competitive Proposals (CP), and Funding and Administrative Actions (FAA) with data collected from EPA's Acquisition System (EAS) as well as information from EPA contract officer representatives (CORs) and contract officers (COs). Timeliness is measured in processing days from the date the procurement request (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. As a result of these efforts, EPA became a more efficient and effective agency by reducing processing time and costs. Beginning in FY 2019, EPA is reporting 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% SA; 65% CP; and 67% FAA.

[27] 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 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					25	50	72	72	Operational Processes	Above Target	
Actual					N/A	66					

Key Takeaways:

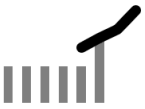
- EPA surpassed its performance target by 32% in FY 2019 by reporting 66 process improvements against a target of 50. The increase in process improvements correlates with deployment of ELMS agencywide. ELMS is a means to promote continuous improvement and uses Lean principles and tools, paired with routine monitoring, measurement and engagement to identify problems, solve problems, and sustain improvements. Examples of process improvements include:
  - EPA Region 5 Great Lakes National Program Office reduced their funding timeframes in Great Lakes Restoration Initiative Grants from 34 days to 14 days with more than three months of sustained improvement (59% improvement).
  - EPA Region 9 Land Division streamlined the tribal grants process, reducing from 136 steps to 56 steps (59% improvement).
  - EPA Region 7 Air and Radiation Division improved the quality of draft Title V operating permits from a 14% first time quality rate to an 84% first time quality rate and is continuing to improve (500% improvement).
  - EPA's Office of the Chief Financial Officer and Office of Compliance improved the Superfund Cost Recovery process by decreasing the number of days to complete a cost recovery request from 30 days to five days (83% improvement).
- The Agency expects each EPA regional or program office to report at least 10 process improvements by FY 2022.

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 is counted as improved if it meets the following criteria: (1) at least 25% improvement over the baseline (stated in measurable/quantifiable terms); (2) visual management is associated with the process; and (3) standard work was created for the process.

Long-Term Performance Goal - By September 30, 2022, increase enterprise adoption of shared services by four[28].

Annual performance goals that support this long-term performance goal:

(PM CF1) Number of administrative shared services.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					6	7	8	10	Shared Services	Above Target	
Actual	4	4	4	4	4	7					

[28] Baseline is four administrative systems/operations shared services in FY 2017. (Footnote updated from *FY 2018-2022 EPA Strategic Plan* published February 12, 2018.)

Key Takeaways:

- Three administrative shared services were deployed in FY 2019: FedTalent for employee training, USAccess for employee identification, and Enterprise Physical Access Systems (ePACS) for federal buildings.
- In FY 2020, EPA plans to adopt one additional shared service: E-Invoicing for vendor payments.

Metric Details: EPA will adopt additional federal shared services when supported by business case analyses. Federal shared services are shared across multiple federal agencies. Enterprise adoption of shared services will ensure 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/FPPS), Payroll (IBC/PeoplePlus), Travel (Concur), and Financial Management (CGI Federal/Compass). No additional shared services were adopted in FY 2018, but the FY 2018 actual was changed from five to four as a result of the revised baseline.

(PM CF2) Number of Agency administrative subsystems.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Units	Preferred Direction	
Target					24	22	22	21	Subsystems	Below Target	
Actual				29	29	29					

Key Takeaways:

- EPA missed the FY 2019 target as a result of reevaluating available resources, timelines and feasibility for retiring various administrative systems.
- EPA is making progress to consolidate agency audit, financial management and payment tracking systems, with a planned decrease of seven Agency administrative systems in 2020 in order to meet the FY 2020 target.

Metric Details: Reducing the number of administrative system interfaces allows EPA users to more easily input and access data and standardizes reporting as payment processing is moved to a federal shared service provider. This 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. The focus is currently on establishing an integrated end-to-end delivery of financial transactions for contracts, grants, and Interagency Agreements into Compass. In FY 2019, EPA adjusted the scope of this measure to include additional administrative subsystems which were not previously counted. This revision resulted in a change to the baseline of existing administrative subsystems from 26 to 29.

Environmental Protection Agency
2021 Annual Performance Plan and Congressional Justification

Table of Contents – Appendix

Coordination with Other Federal Agencies 747
Major Management Challenges 774
EPA User Fee Programs 782
Working Capital Fund 787
Acronyms for Statutory Authority 789
FY 2021 STAG Categorical Grant Programs 793
Program Project By Program Area 803
Eliminated Programs 813
Eliminated Program/Projects 813
Eliminated Sub-Program/Projects 817
Expected Benefits of E-Government Initiatives 818
FY 2021 Administrator's Priorities 823
Proposed FY 2021 Administrative Provisions 824
Attorney Fee and Cost Payments 830
Physicians' Comparability Allowance (PCA) Plan 831
Physicians' Comparability Allowance (PCA) Worksheet 834
IT Resources Statement 835
IG's Comments on the FY 2021 President's Budget 839
EPA Budget by National Program Manager and Major Office 841
FY 2021: Consolidations, Realignments, or Other Transfer or Resources 846
S. 2276 – Good Accounting Obligation in Government Act 847

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 the USDA and others to improve air quality while supporting sustainable agriculture.

Regional Haze

EPA works with the DOI, National Park Service (NPS), and U.S. Forest Service (USFS) 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. EPA also consults with the DOI's Fish and Wildlife Service (FWS) and the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) on potential endangered species issues.

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 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 has worked 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 the USFS work closely with states to deploy monitors and report monitoring information and other conditions on *AIRNow*. The *AIRNow* Program also collaborates with the NPS and the 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, the USDA, and the 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 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 the 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 the DOT's fuel economy and fuel consumption standards programs, implements vehicle and commercial truck greenhouse gas standards with a focus on industry compliance to ensure the standards are realized.

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 DOE and DOT to fund applied research projects including transportation modeling projects. EPA also works closely with the DOE on refinery cost modeling analyses to support clean fuel programs, and coordinates with the 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, and human health. These partnerships can involve policy assessments and toxic emission reduction strategies in different regions of the country. EPA works with the 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, the National Institute of Environmental Health Sciences (NIEHS), and the 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 the 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), the 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 the 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 multinational environmental agreements working closely with the DOS and other federal agencies, including OMB, Office of Science Technology and Policy (OSTP), Council on Environmental Quality (CEQ), USDA, Food and Drug Administration (FDA), Department of Commerce (DOC), NOAA, and NASA.

EPA works with other agencies, including the Office of the United States Trade Representative (USTR) and the Department of Commerce (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 the 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 NRC, DOE, DOD, Department of Health and Human Services (DHHS), 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.

Research Supporting the Air and Radiation Program

EPA continues to coordinate with other agencies, such as NOAA, DOE, USDA, National Institutes of Health (NIH), and FHWA to develop sustainable approaches to manage risks from air pollution.

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.

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 the Department of Housing and Urban Development (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 the Department of Defense, the Department of Energy, USDA, FDA, DHHS, the NIH, the Consumer Product Safety Commission, the Small Business Administration (SBA), NASA, FAA, and OMB.

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 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 the 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, recently 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.

Carbon Capture, Utilization, and Storage (CCUS)

EPA supports the Internal Revenue Service's development of regulations and guidance addressing 45Q, the IRS tax code section that gives companies tax credits for geologic sequestration of CO_2. EPA's role has been to provide them regulatory background on the Underground Injection Control program. The Agency also participates in quarterly and ad hoc meetings with DOE and DOI 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 CO_2 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.

National Water Reuse Action Plan Development and Implementation

EPA is leading the development of the National Water Reuse Action Plan (WRAP) in close partnership with federal partners. By FY 2021, the Federal WRAP Team will have held multiple, multi-stakeholder meetings to guide and facilitate development. The team also uses the Interagency Water Working Group and the Interagency Sustainability Working Group as forums to coordinate federal interests in Water Reuse. Federal Partners actively engaged in the development of the WRAP with EPA include but are not limited to: DOI, DOE, NOAA, USDA, CDC, FDA, NASA, GSA, and DOS.

Watersheds Restoration and Nonpoint Source Pollution

EPA and USDA are co-implementing the National Water Quality Initiative in about 200 watersheds nationwide. EPA also co-implements the coastal nonpoint source pollution program with NOAA. EPA also co-chairs, with NOAA, the U.S. Coral Reef Task Force's Watershed Working Group to reduce land-based source pollutants to coral reef watersheds.

National Pollutant Discharge Elimination System (NPDES) Program

Since inception of the NPDES Program under the CWA, EPA maintains relationships with various federal agencies to implement pollution controls for point sources under NPDES. EPA works with the FWS and NMFS on consultation for protection of endangered species. EPA works with the Advisory Council on Historic Preservation on National Historic Preservation Act implementation. EPA and its stakeholders rely on USGS monitoring data to help inform pollution control decisions. The Agency also works closely with SBA and OMB to ensure that regulatory programs are fair and reasonable. The Agency coordinates with NOAA on efforts to ensure that NPDES programs support coastal and national estuary efforts, and with the DOI on mining issues. The Agency also coordinates with the FHWA to reduce the impacts of stormwater from roads.

Vessel Discharges

EPA addresses vessel discharges under Section 312 of the CWA. EPA and DOD jointly regulate incidental discharges from vessels of the Armed Forces, and coordinate with the USCG, FWS, and NOAA. EPA, in consultation with USCG, is responsible for developing national performance standards for categories of discharges from certain commercial vessels and for ballast water from commercial vessels.

Clean Water and Drinking Water State Revolving Funds

EPA's State Revolving Fund programs work with HUD and USDA to foster collaboration on jointly funded infrastructure projects. In many states, coordination committees have been established with representatives from the three programs.

Monitoring and Assessment of Nation's Waters

EPA and USGS co-chair the National Water Quality Monitoring Council, a national forum for scientific discussion of strategies and technologies to improve water quality monitoring and data sharing. The Council membership includes other federal agencies, state and tribal agencies, non-governmental organizations, academic institutions, and the private sector. Under an MOU, EPA and USGS operate the national Water Data Portal, providing USGS and EPA ambient water quality data in a common format. EPA has an Interagency Agreement with the USGS for the development of *NHDPlus* version 2, which includes all U.S. state and territory data, with the exception of Alaska. EPA also collaborates with the USGS, NOAA, NPS, USDA, FWS, BLM, and the USFS on implementation, analysis and/or interpretation of the results of the National Aquatic Resource Surveys - an EPA, state and tribal partnership to assess and report on the condition of the Nation's waters and changes over time using nationally consistent and regionally relevant methods.

Wetlands

EPA, FWS, USACE, NOAA, USGS, USDA's NRCS, USFS, FEMA, and FHWA coordinate on a range of wetlands activities, including: studying and reporting on wetlands trends in the U.S.; diagnosing causes of coastal wetland loss and identifying opportunities to stem the losses; statistically surveying the condition of the Nation's wetlands; and developing methods for better protecting wetland function. Additionally, EPA and USACE work together in implementing the CWA Section 404 regulatory program. EPA also works with the FWS and NOAA on permitting matters. EPA and USACE are working with other agencies, including USGS, NASA, NOAA, FWS, and NRCS to develop geospatial maps of wetlands and other aquatic resources.

Natural Resources Damage Assessment and the Restore Council

EPA works in partnership with fellow federal and state trustees and their representatives to support the ongoing Natural Resources Damage Assessment and the Restore Council (Gulf Coast Ecosystem Restoration Council). Partners include NOAA, DOI, and USDA.

Water Quality Standards

EPA coordinates with the DOI and DOC to protect listed species and critical habitats. If EPA determines that its approval of water quality standards may affect listed species or designated critical habitat, EPA engages with the FWS and NMFS to conduct consultation consistent with Section 7 of the Endangered Species Act.

Environmental Contaminants in Fish and Shellfish

EPA and FDA work in close cooperation to ensure a unified U.S. Government message regarding the risks and benefits of consuming commercial and noncommercial fish and shellfish. The two agencies collaborate on activities intended to address environmental contaminants in fish and shellfish and the safety of fish and shellfish for consumption by consumers.

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.

Land and Emergency Management Programs

Brownfields

EPA's Brownfields and Land Revitalization Programs partner with the Department of Labor (DOL) and the NIEHS to support environmental workforce development and fund job training and placement programs in brownfield communities. The Programs work with the USDA, DHHS, and the ATSDR to identify ways communities can work with federal programs to increase food access in all communities and improve access to quality health care, in response to community requests. Improved access to healthy food and health care services can catalyze redevelopment and employment that contribute to healthier and more sustainable communities. The Programs also 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. The Programs participate with DOC's Economic Development Integration (EDI) team to identify opportunities for greater interagency collaboration for coordinated and effective investment of federal economic development resources. EPA leads the Brownfields Federal Partnership, which includes more than 20 federal agencies dedicated to the cleanup and redevelopment of brownfields properties. Partner agencies work together to prevent, assess, safely clean up, and redevelop brownfields.

Economically Distressed Communities

EPA provides expertise to HUD, DOT, DOC, DHHS, DHS, DOJ, SBA, DOL, and other agencies and departments on the importance of land revitalization, the use of green infrastructure strategies,

green demolition, Opportunity Zone efforts, and sustainable development strategies so that the federal government can better assist economically distressed communities.

Superfund Remedial Program

The Superfund Remedial Program maintains ongoing coordination with the ATSDR, NIEHS, and USACE to promote information sharing and greater efficiencies. There are several areas where collaboration and sharing resources are of mutual benefit. For example, ATSDR has a statutory mandate to complete health assessments on sites listed on EPA's National Priorities List (NPL), while EPA conducts site characterization and performs site work. Moreover, EPA site managers strive to work with their ATSDR counterparts to coordinate messages for the public. For NIEHS, EPA collaborates with NIEHS in collaborating with academia and conducting research related to the toxicity of contaminants, site characterization, and site remediation, as well as explaining risk information to communities and other parties. EPA collaborates with USACE on 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. Most notably, the USACE has the technical design and construction expertise and contracting capability needed to assist the Superfund Program in implementing complex remedial action projects. USACE also provides technical on-site support to EPA in the enforcement oversight of numerous construction projects performed by private Potentially Responsible Parties.

Superfund Federal Facilities Restoration and Reuse Program

The Superfund Federal Facilities Restoration and Reuse Program coordinates closely with other Federal Agencies (OFAs), states, tribes, state associations, and others to implement its statutory responsibilities to ensure protective and efficient cleanup and reuse of federally contaminated land on the NPL. In addition, EPA continues to work to streamline and improve the Superfund process through the Superfund Task Force recommendations. Successful implementation of these recommendations requires strengthening partnerships and enhancing engagement with OFAs, states, and tribes by having regularly-scheduled meetings that focus on targeting and resolving critical programmatic issues, emphasizing protective cleanups, and recognizing site reuse opportunities and successes. EPA, OFAs, states, and tribes have committed to early meeting planning and focusing on issues with a problem-solving and action-oriented approach.

The Program coordinates with national organizations that help to improve engagement with other OFAs such as Association of State and Territorial Solid Waste Management Officials (ASTSWMO) and the Environmental Council of the States (ECOS). ASTSWMO has a Federal Facilities Research Center Subcommittee which promotes and improves state and territory involvement in the cleanup and reuse of contaminated federal facilities and facilitates information exchange by and between states, territories, and federal agencies. This includes: identifying and researching emerging issues related to state and federal cleanup programs at federal facilities; producing and disseminating resource documents, tools; and working with EPA and OFAs on a variety of federal facilities issues and forums.

EPA participates in a dialogue with ECOS and DOE for the purpose of enhancing ongoing working relationships among partners involved in the cleanup of DOE Environmental Management sites.

The Dialogue focuses on the dispute resolution, waste disposition, and environmental indicators. The Dialogue is an example of how each agency can advance DOE site cleanups and foster an understanding of challenges and successes nationally. EPA also participates with OFAs on the Munitions Response Dialogue, partners with DOD research and development programs on the munitions management track, and participates on the Intergovernmental Data Quality Task Force.

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 pose to human health and the environment. EPA's leadership in federal preparedness begins with its co-chairing the National Response Team (NRT) and the 13 Regional Response Teams with the USCG. These teams, which have member participation from other key federal agencies, deliver federal assistance to state, local, and tribal governments to plan for and respond to natural disasters 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.

The National Response Framework (NRF), under the direction of the 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.

Oil Spills

Under the Oil Spill Program, EPA provides assistance to agencies such as FWS and the USCG and works in coordination to address oil spills 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.

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 in order 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, 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, DOE, DOI, and NASA to improve characterization and risk management options for dealing with subsurface contamination. EPA, USACE, and the U.S. Navy signed an MOU to increase collaboration and coordination in

contaminated sediments research. EPA also works through the Interstate Technology Regulatory Council (ITRC) in defining continuing research needs through its teams on topics including permeable reactive barriers, radionuclides, and brownfields.

Chemical Safety and Pollution Prevention Programs

General Coordination for Chemical Safety

Following enactment of the TSCA amendments in June 2016, 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. In FY 2021, EPA intends to use this group to review TSCA materials including, but not limited to: risk evaluations, and documents related to scoping of existing chemicals for risk evaluation.

EPA also engages in biannual meetings with the OMNE[1] 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 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 in 1997 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 and the Progress Report on EPA-specific goals, objectives and actions under the Federal Lead Action Plan.* In FY 2021, 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 Chemical Safety

To participate more effectively in international agreements addressing chemical safety (e.g., persistent organic pollutants [POPs] and mercury), EPA coordinates with other federal agencies, including the USTR, DOS, DOC, and DHHS. EPA also coordinates with ATSDR, NIH, and CPSC on matters relating to the work of the OECD on test guideline harmonization and other chemical safety program work. EPA also engages in bilateral cooperation and information exchange with

[1] The OMNE Committee is named for the first letter in each participating agency's name.

the European Chemicals Agency (ECHA), Canada, China, Australia, and others. EPA works closely with the DOS in leading the technical and policy engagement for the United States in the Minamata Convention on Mercury, as well as with the DOE, FDA, and USGS.

EPA engages in trilateral cooperation with Canada and Mexico through the North American Free Trade Agreement (NAFTA) Technical Working Group (TWG) on Pesticides to promote trade and regional cooperation among governments through harmonization and work sharing. EPA continues to participate in the development, validation, and adoption of new assays as well as new test procedures that have led to global harmonization of test guidelines via the OECD Test Guidelines Programme (TGP). EPA works with EU countries in support of OECD TGP's mutual acceptance of data in efforts to reduce the need to repeat safety studies due to incompatible test protocols. Additionally, EPA will continue international engagement in the OECD Working Group on Pesticides (WGP) to share pesticide registration work and develop tools to monitor and minimize pesticide risk to human health and the environment. EPA collaborates with international organizations, such as the European Food Safety Authority (EFSA) and the Australian Pesticide and Veterinary Medicine Authority to provide scientific advice and sett international standards related to food and feed safety, animal health and welfare, plant health and nutrition.

Certification and Training, Worker Protection, IPM, and Environmental Stewardship

EPA's Pesticide Program will continue to coordinate with USDA, DOD, DOI, DOE, tribes, territories, and state lead agencies for pesticides, in order to implement the Certification and Training Program 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 grants, cooperative agreements with, or interagency agreements to 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 in order to assist the Agency in assessing the potential risks of pesticides in the diets of adults and children. Specifically, EPA relies on food consumption data developed by the DHHS as part of their NHANES (National Health and Nutrition Survey) survey, and is a part of EPA's dietary risk assessment for pesticides and pesticide residue (concentration) data in food commodities, which is generated by the USDA in its Pesticide Data Program (PDP).

Endangered Species & Pollinator Protection

EPA's Pesticides Program will continue collaborating with the USDA, FWS, and NMFS on developing methods for assessing potential risks and effects of pesticides to endangered and threatened species. 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 DOD, DHS, USDA, FDA, FEMA, and other federal, tribal and state organizations on a variety of technical and policy homeland security issues. These issues focus on protecting the public and food and agriculture sectors from threats associated with use of chemical and biological agents or from natural disasters. EPA collaborates with these organizations on research pertaining to effective disinfectants for high threat microorganisms, planning for response to various potential incidents, training and development of policies and guidelines. EPA continues to partner with the OSHA, NIOSH, and CPSC on risk assessment and risk mitigation activities.

Pesticide Program Dialogue Committee (PPDC)

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 individuals 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.

General Research to Support Chemical Safety

EPA's Toxicity Forecaster (ToxCast™) is part of a multi-agency effort under the *Tox21* collaboration MOU. *Tox21* pools chemical research, data and screening tools from multiple federal agencies including EPA, and the NIH and FDA. ToxCast™ utilizes existing resources to develop faster, more thorough predictions of how chemicals may affect human and environmental health. Tox21 and ToxCast™ are screening nearly 10,000 environmental chemicals for potential toxicity in high-throughput screening assays at the NIH National Center for Advancing Translational Sciences (NCATS). EPA has an agreement to provide funding to support the effort.

Per- and Polyfluoroalkyl Substances (PFAS) are a class of chemicals of emerging concern (CECs) in the environment. In collaboration with NIEHS, EPA is conducting high throughput computational toxicological screening assays on an initial set of 150 PFAS chemicals which have been selected to represent the full array of chemical and physical structural properties of the entire PFAS universe of compounds. The results will be used to identify subsets of PFAS chemicals with potentially high toxicity in order to prioritize those for more detailed study, as well as enable quantitative analyses to make inferences about toxicity of chemicals for which there are no experimental data.

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 quickly and cost-effectively evaluate chemicals 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, as well as efforts to prioritize and coordinate chemical evaluations. IRIS maintains an interagency working group that consists of various federal agencies (e.g., DOD, NASA, SBA, DOT, DOE, DOI, etc.), and the White House. EPA also coordinates, respectively, with: ATSDR, through an MOU on the development of toxicological reviews and toxicology profiles; NIEHS and the National Toxicology Program, on assessment methodology, software, and assay development platforms; FDA on advisories and reports; and DOD on assessment development. In addition, EPA contracts with the National Academy of Sciences' National Research Council (NRC) on very difficult and complex human health risk 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 Bureau of Indian Affairs, 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 pesticide imports and on hazardous waste and Cathode Ray Tube exports, as well as on a variety of other import/export issues under the various statutes (e.g., imports of vehicles and engines).

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. The Agency has entered into an agreement with the 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 the 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 the FBI, CBP, DOL, U.S. Treasury, USCG, DOI 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

Executive Order 12088 on *Federal Compliance with Pollution Control Standards* directs EPA to monitor compliance by federal agencies with all environmental laws. 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 through the Federal Facilities Environmental Stewardship and Compliance Assistance Center (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.

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. In addition, 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, as part of the Superfund Task Force Recommendations, EPA has been working on an MOU with FLMAs to improve the efficient and effective use of federal resources to cleanup at mixed ownership mining sites. EPA also 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.

Under Executive Order 12580, EPA's Superfund Federal Facilities Enforcement Program assists federal agencies in complying with CERCLA, and 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.

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 United States 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 and FDA on the Winning on Reducing Food Waste initiative which includes international cooperation on measuring food waste reductions and pilot activities that can create market opportunities for U.S. technologies and innovation.

Supporting Environmental Priorities in Global Trade Policy and Implementation of Environmental Cooperation Agreements

EPA plays a key role in ensuring that trade-related activities sustain environmental protection since the 1972 Trade Act mandated interagency consultation by USTR on trade policy issues. EPA is a member of the Trade Policy Staff Committee and the Trade Policy Review Group, interagency mechanisms that are organized and coordinated by USTR to provide advice, guidance, and clearance to the USTR in the development of U.S. international trade and investment policy.

EPA works with DOS and other agencies to support implementation of environmental, ecosystem, and human health protections in environmental cooperation agreements, or their equivalent, associated with U.S. Trade Agreements. In North America, EPA will be involved in implementing the Environment Chapter of the new USMCA. EPA represents the U.S. on the CEC and collaborates with the U.S. interagency (NOAA, CDC, DOI, FWS, DOS, USTR, DOC, and others) to promote environmental, ecosystem, human health and sustainable growth cooperation with Canada and Mexico. EPA also works with the DOC to promote the export of U.S. environmental technologies, and with the Treasury to ensure adherence to environmental safeguards involving multilateral development bank project lending.

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.

Working 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.[2]

Central Planning, Budgeting and Finance Programs

Working with Federal Partners on Improving Management and Accountability throughout the Federal Government

EPA participates and makes active contributions to standing interagency management committees, including:

- the Chief Financial Officers Council focuses on improving resources management and accountability throughout the federal government;
- the Performance Improvement Council 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 the Federal Assistance Awards Data System; and
- the President's Management Council oversees developing and implementing Cross-Agency Priority (CAP) goals.

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

[2] For additional information, please visit: https://www.epa.gov/tribal/federal-infrastructure-task-force-improve-access-safe-drinking-water-and-basic-sanitation.

services to other federal agencies to increase operational efficiency and save the government money. EPA-FERC currently provides relocation services internally to all EPA offices, and externally to the Transportation Security Administration (TSA), DOL, Office of Personnel Management (OPM), United States Patent and Trademark Office (USPTO), DHHS, and the USDA. EPA also coordinates appropriately with Congress and other federal agencies, such as the U.S. Treasury, the Government Accountability Office (GAO), and GSA.

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 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 Partnership which is designed to reduce the administrative burdens associated with research grants.

- The Partnership for Sustainable Communities initiative, a collaborative effort with HUD and DOT, improves the alignment and delivery of grant resources to communities designated under certain environmental programs. It also helps identify cases in the Program that may warrant consideration of suspension and debarment.

- 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 CEQ, the FHWA, NOAA, and the Gulf Coast Ecosystem Restoration Council. SEE participants provide administrative, technical, and professional support to these agencies for projects relating to pollution prevention, abatement, and control.

- 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 office 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

Throughout FY 2020 and FY 2021, 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 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 Line of Business 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.

eRulemaking

The eRulemaking Program's mission encompasses two areas: (1) to improve public access, participation in, and understanding of the rulemaking process; and (2) to improve the efficiency and effectiveness of Agency partners' notice and comment process when promulgating regulations. The eRulemaking Program maintains a public website, http://www.regulations.gov/, which enables the public to access and submit comments on various documents that are published in the Federal Register, including proposed regulations and Agency-specific notices. The Federal Docket Management System (FDMS) is the agency side of Regulations.gov. FDMS enables agencies to administer public submissions regarding regulatory and other documents posted by the agencies on the regulations.gov website. The increased public access to the agencies' regulatory process enables a more informed public to provide supporting technical/legal/economic analyses to strengthen the agencies' rulemaking vehicles.

At the beginning of FY 2020, the Program Managing Organization transitioned from EPA to the GSA. EPA will partner with GSA to participate in the eRulemaking Program for efficient and transparent public access to EPA's regulations.

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 2.8 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. The EN also is coordinating with multiple agencies via the Broadband Interagency Working Group chaired by the National Transportation and Information Agency to increase broadband access. Access to broadband is critical to fully participating in the EN and is of particular concern for tribes who often lack this access. EPA will participate on current and future workgroups to implement Presidential actions to promote the use of broadband in rural America. This includes tribal lands. EPA is currently represented on the Leveraging Federal Assets workgroup co-chaired by DOI and GSA.

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 towards the goal to automate the current 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.

Geospatial Information

EPA works with DOI, NOAA, USGS, NASA, USDA, and DHS on developing and implementing geospatial approaches to support various business areas. It also works with 25 additional federal agencies through the activities of the Federal Geographic Data Committee (FGDC) and the OMB Geospatial Line of Business (Geo LoB), for which EPA leads several key initiatives. EPA also participates in the FGDC Steering Committee and Executive Committee and is part of the Geospatial Data Act Implementation Tiger Team. 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 Geospatial Platform, EPA's Environmental Dataset Gateway, the EN, National Environmental Policy Act (NEPA) Assist, 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.

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 cost-benefit 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 costs and benefits of federal policies and programs. Occasionally, OP also provides technical reviews of other agencies research and analyses.

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. 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 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.

White House Opportunity and Revitalization Council

The Administrator of EPA serves as a member of the Opportunity and Revitalization Council which was established to encourage public and private investment in urban and economically distressed areas, including qualified opportunity zones. As part of this effort, EPA coordinates with other federal agencies to further facilitate investment in economically distressed communities, protect taxpayers by optimizing use of federal resources, expanding quality educational opportunities, and improving economic development and environmental outcomes.

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 inter-governmental 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.

Major Management Challenges

Introduction

Consistent with requirements in the Reports Consolidation Act of 2000, the Office of Inspector General identifies what they consider the most serious management challenges facing the Agency and assesses the Agency's progress in addressing those challenges. The Environmental Protection Agency has established procedures for addressing its major management challenges. The Agency uses audits, reviews, and program evaluations conducted internally and by the OIG, the Government Accountability Office, and the Office of Management and Budget to assess program effectiveness and identify potential management issues. The Agency recognizes that management challenges, if not addressed adequately, may prevent the Agency from effectively meeting its mission. EPA remains committed to addressing all management issues in a timely manner and to the fullest extent of its authority.

The following discussion summarizes each of the FY 2019 management challenges identified by the OIG and presents the Agency's responses.

1. EPA Needs to Improve Oversight of States, Territories and Tribes Authorized to Accomplish Environmental Goals

Summary of Challenge*: The OIG believes the EPA leadership needs to demonstrate an organizational commitment to correcting problems with the Agency's oversight of key state, territorial and tribal programs by aligning the proper people, resources and processes, and developing a framework for addressing oversight issues. The Agency also needs to develop a system for monitoring state, tribal and territorial oversight effectiveness so that it can consistently work toward demonstrating its progress in correcting this management challenge across all program offices.*

Agency Response: In 2017, an EPA workgroup tasked with improving the oversight of state-delegated programs determined that EPA lacks a framework for assessing the effectiveness of its oversight activities. This results in inconsistent application of oversight activities across the Regions of environmental programs delegated to states.

In October 2018, the Acting Administrator issued a memo to Agency leadership, emphasizing key principles for EPA's oversight of programs delegated to states and tribes. EPA is working with two programs to pilot a method for ensuring programmatic reviews adhere to the principles of this memo and a core set of standardized work elements designed to effectuate a more consistent approach to oversight activities.

The Agency has taken the following efforts to address this management challenge:

- Regions are using a template to organize discussions with states on NPDES real-time reviews, and an SOP for CAA Title V programmatic reviews.
- EPA is working with states to identify the next program areas to target for oversight reviews.

- The Agency is developing a national permitting oversight policy to standardize its review of the quality and timeliness of federal permits issued by states.

EPA has a long-term performance goal supporting Goal 2/Objective 2.1, Enhance Shared Accountability in the FY 2018 – 2022 EPA Strategic Plan: "By September 30, 2022, increase the use of alternative shared governance approaches to address state, tribal, and local community reviews" and a supporting FY 2020 annual performance goal "Number of alternative shared governance approaches to address state, tribal, and local community reviews." This measure tracks the number of program areas where EPA has used the oversight framework for EPA's oversight of state implemented federal programs and/or where EPA has worked with the states to solve a jointly identified issue. EPA will define, develop, pilot, evaluate, and launch a comprehensive system to evaluate state and local implementation of federal environmental programs by 2020. The "comprehensive system" is defined as the overarching principles as laid out in the principles memo, coupled with a template or checklist populated with state-and regional specific details on the review activity in question. The purpose of this effort is twofold: to begin to standardize EPA's oversight work across EPA regions, and to maximize state and federal resources by focusing on the most important work.

Responsible Agency Official: Robin Richardson, Principal Deputy Associate Administrator, Office of Congressional and Intergovernmental Relations

2. EPA Needs to Improve Its Workload Analysis to Accomplish Its Mission Efficiently and Effectively

Summary of Challenge: *The EPA has not addressed the workforce planning requirements of 5 CFR Part 250, Subpart B, Strategic Human Capital Management, April 11, 2017. In the rule, workforce analysis is a component of workforce planning. The EPA's ability to assess its workload—and subsequently estimate workforce levels necessary to carry out that workload—is critically important to mission accomplishment. Prior to the rule, the EPA OIG and GAO had reported that the EPA had not incorporated workload analysis into its resource allocations. Specifically, the EPA had not fully implemented controls and a methodology to determine workforce levels based upon analysis of the Agency's workload. Due to the broad implications for accomplishing the EPA's mission, the Agency has included this management challenge since 2012.*

Agency Response: The EPA has addressed the workforce planning requirements of 5 CFR Part 250, Subpart B, Strategic Human Capital Management by completing an EPA FY 2019 HCOP (Human Capital Operation Plan) and beginning work to update the plan for FY 2020. The EPA believes it also is using workload analyses as one factor to plan workforce levels and examine critical processes.

To implement 5 CFR Part 250 "Personnel Management in Agencies", particularly Subpart B "Strategic Human Capital Management", the Office of Personnel Management requires agencies to conduct workforce analyses that: 1) describe the current state; 2) project human resources needed to achieve organizational goals; and 3) identify potential shortfalls.

To satisfy these requirements, EPA has drafted its FY2020-2023 Workforce Plan, which applies to all full-time and part-time classified, "at will," and wage employees. The Plan presents an overview of current and projected workforce trends, profiles core occupations and reflects contemporary strategies and tools. It also includes proposed gap analyses and strategies to mitigate and plan for future skill and occupational gaps. Plan implementation will support EPA in acquiring, engaging, developing, and retaining the workforce talent necessary to meet Agency goals and objectives, now and in the future.

In addition, to facilitate workforce planning, EPA has developed a Talent Enterprise Diagnostic tool (a SharePoint web application) to help conduct competency assessments. The tool will collect and present information to track, update, and assess both current skills required for positions throughout EPA along with the corresponding skills of incumbents in those positions. EPA completed two TED pilots over the past two years and updated the tool based on user feedback. The Agency is implementing TED via a phased approach concentrating on its Mission Critical Occupations, beginning the 1st Quarter of FY20 with cybersecurity positions, one of the Agency's priority MCOs.

To further advance workforce planning, EPA developed a Workforce Diversity Dashboard and a Workforce Demographics Dashboard for EPA managers' use. Both tools include visually dynamic and integrated reports containing snapshots of the Agency's workforce in various demographic categories. The Dashboard's data are updated monthly from the EPA's Federal Personnel and Payroll System and the Office of Management and Budget's approved Applicant Race and National Origin questionnaire. Data include, but are not limited to, aggregate self-identified information on race, sex, national origin, age, targeted disability status, and education level as well as aggregate information on employees' retirement eligibility, grade, salary, and program/office location. The dashboards provide managers with essential tools to both view the current state of their workforce and plan for future needs. Both actions are vital to workforce planning and succession management, which are currently two very high-profile processes within the federal government and EPA.

The EPA Lean Management System is designed to visualize, examine and understand factors influencing the Agency's ability to sustain its work across offices and programs. Agency leadership is building on ongoing ELMS implementation efforts by working with programs and regional offices to look more comprehensively across Agency FTE allocations and identify opportunities to standardize work where possible. Related Kaizen projects include state oversight, EPA's field presence, state and tribal assistance flexibility, community and infrastructure investments, FOIA responses, reporting requirements, EPA laboratories, environmental permitting, and acquisitions.

EPA's largest recent workload analysis effort examined Superfund Remedial FTE levels. In FY 2020, the Superfund Program is implementing a multi-year national FTE redistribution plan to inform the realignment of regional Superfund Remedial and Technical Enforcement FTE as workloads shift among regions. Also, in the Superfund Program, a Lean Kaizen is looking to standardize Superfund billing processes.

Since grants represent the largest type of Agency spending with direct effects on EPA state and tribal partners, grants management analyses continue to be an Agency priority. In FY 2019, the Agency surveyed grants Project Officers (POs) to better understand the time required to complete major components of Project Officer work and major challenges faced by POs at different stages of the grants process. The Agency analyzed the results to inform continuing efforts to streamline work and update policies, processes, and procedures. The information is presented to senior management at semi-annual Grants Management Council meetings for their use in making resource determinations.

As the OIG has acknowledged, EPA's highly variable, multi-year, and non-linear functions and activities complicate using FTE-based workload analyses as tools to determine precise FTE levels. The Agency believes that the IG's proposal "*to determine workforce levels based upon analysis of the agency's workload"* doesn't consider that EPA, like all Federal Agencies, must operate within detailed specifications and constraints of each year's Congressional appropriations.

In conclusion, the Agency believes it complies with the workforce planning requirements of 5 CFR Part 250, Subpart B, Strategic Human Capital Management and uses workload planning tools through the Agency efforts outlined above. The Agency believes it is important to design cost effective workforce and workload efforts that support Agency priorities and streamlining efforts, while remaining cognizant of Congressional constraints on flexibility.

Responsible Agency Official: Maria Williams, Acting Director, Office of Budget

3. Enhancing Information Technology Security to Combat Cyber Threats

Summary of Challenge: *The OIG acknowledges that the Agency continues to initiate actions to further strengthen or improve its information security program. However, the Agency lacks a holistic approach to managing accountability over its contractors and lacks follow-up on corrective actions taken.*

Agency Response: The Agency is committed to protecting its information and technology assets. EPA understands the prevalence and complexity of the ever-growing cyber security attacks and is aware of the potential impact to the Agency's mission if information assets are compromised. EPA has established and implemented processes and internal controls for monitoring and managing contractor support actions to address concerns associated with this management challenge. At a high level this includes:

- Developing and implementing processes within the Office Mission Support/Office of Resources and Business operations to improve management and oversight of audits and corrective actions.
- Working with the Office of General Counsel (OGC) to develop standard security language into the Agency's Environmental Protection Agency Acquisitions Guide (EPAAG) Section 39.1.2.
- Incorporating a verification for the cybersecurity requirements identified in the EPAAG 39.1.2. into the Federal Information Technology Acquisition Reform Act (FITARA) process.

- Developing training for contract officers and contract officer representatives on their responsibilities for identifying contracts that require EPAAG Section 39.1.2 tasks.
- Establishing a tracking and reporting process that ensures all contractors with access to EPA information systems complete information security awareness training, and that contractors with significant security responsibilities also complete role-based training.
- Ensuring adequate cybersecurity is implemented on contractor operated systems by:
    - Assessing systems for proper implementation and operation of adequate cybersecurity controls.
    - Monitoring for timely completion of corrective actions for identified cybersecurity weaknesses.
    - Managing risks at the tactical, mission and enterprise levels.

In addition, EPA has made significant strides addressing other recommendations highlighted in the OIG report. At a high level this includes:

- The Agency worked with the Department of Homeland Security regarding the risk of the Electronic Manifest System. As a result, EPA maintained its original categorization but agreed to annual reviews and when significant changes to the system occur to review the system's categorization.
- The Agency replaced the incident tracking system and implemented controls in the new system to protect the confidentiality of PII and sensitive PII and enforce password management requirements according to federal and agency guidance.
- The Agency has fully documented the CIO's role in information security through policy and procedures.
- The Agency has documented and implemented controls to validate plans of action and milestones for vulnerability testing results.
- The Agency has established a process to periodically review the Agency's tracking system's security settings to validate each setting meets the Agency's standards and has implemented audit logging capabilities to capture data changes and a log review process.

These processes were reviewed by the OIG for the FY 2019 FISMA report and found to be adequate.

Responsible Agency Official: Robert McKinney, Director, Office of Information Security and Privacy

4. EPA Needs to Improve on Fulfilling Mandated Reporting Requirements

Summary of Challenge: *OIG believes that the Agency faces challenges in tracking and submitting reports mandated by law that contain key program information for Congress, the Administrator and the public. Specifically, the Agency needs to make a comprehensive effort across the Agency to identify the causes and implement targeted plans to address those causes. Additionally, EPA must continue to work with Congress to eliminate duplicative reports.*

Agency Response: EPA has taken the corrective actions identified in the 2018 OIG Report regarding the BEACH Act Report to Congress. That Report has since been issued to Congress. The Agency continues to implement the OIG's recommendations. For example, a memorandum

was issued in March 2018 to remind EPA's Assistant Administrators and Associate Administrators that the Agency's standard practice is to track Reports to Congress by using the Action Development Process Tracker. The Agency is addressing issues related to the upcoming replacement of the ADP Tracker. Additionally, EPA continues to provide a list of the unnecessary and duplicative reports that we suggest eliminating from our statutes to OMB as part of the budget process, in consultation with Congress. The Agency continues to implement the corrective actions identified in the 2018 OIG Report, which will improve the tracking of Reports to Congress so that statutory requirements are not missed in the future.

The Agency has taken the following efforts to address this management challenge:

- In March 2018, a memorandum was issued reminding program offices of their tracking requirements for Reports to Congress.
- In September 2018, EPA engaged with Congress about eliminating the reporting requirements for the 14 Reports to Congress that the Agency had identified as duplicative or unnecessary.
- Throughout 2018 and 2019, EPA coordinated management of the Agency's inventory of Reports to Congress. The Agency identified the ADP Tracker and its upcoming replacement as the appropriate tools for tracking statutorily-mandated Reports to Congress and those required by appropriations law.
- In September 2019, EPA provided OMB with a proposed list of unnecessary or duplicative reports as part of the FY 2021 budget process.
- In February 2020, EPA is preparing to issue a memorandum identifying new Reports to Congress that should be included in ADP Tracker, if not already identified by program offices.

Responsible Agency Official: Robin Richardson, Principal Deputy Associate Administrator, Office of Congressional and Intergovernmental Relations

5. EPA Needs Improved Data Quality and Should Fill Identified Data Gaps for Program Performance and Decision-Making

Summary of Challenge: *According to recent OIG reports poor data quality negatively impacts EPA's effectiveness in overseeing programs that directly impact public health. These reports point to a systemic problem with data quality, making data analysis more difficult and less reliable.*

Agency Response: Under the Clinger Cohen Act (1996), EPA Chief Information Officer in the Office of Mission Support (OMS) has delegated authority for information quality including oversight responsibility for the Agency's Quality Program, as described in EPA's Quality Policy and Procedure. The Agency's Quality Program is decentralized and implemented by the National Program Offices and Regions with specific responsibilities for assuring the quality of data produced and used are appropriate for their programmatic decisions.

EPA does not view the data quality issue raised by the OIG as a management challenge. It is critical that the data supporting enforcement, regulatory and other program decisions be based on sound, defensible data. OMS has begun revising the Agency's Quality Directives to clarify that it is the responsibility of program and regional offices senior management to ensure that these data are of

the appropriate quality for those uses. The revised Directives will include a requirement for Assistant Administrators and Regional Administrators to certify annually that their organizations are implementing the Agency's Quality Directives and that the quality of data supporting their programmatic decisions are appropriate for the intended uses.

Through Quality System Assessments (QSA) OMS identifies findings requiring corrective actions; areas needing improvement, and best practices that may impact performance of the Agency-wide Quality Program. OMS is responsible for developing tools and processes to guide consistent implementation of quality across the Agency. One such tool is the Quality Assurance Project Plan (QAPP) that defines a documented, systematic approach for planning, collecting and using QA data and information at the project level. OMS uses SharePoint and holds regular calls with stakeholders to track progress and results. Cross-cutting Agency issues including risks, successes, opportunities for improvement and resource needs are reported to the CIO.

Responsible Agency Official: Vincia Holloman, Director, Enterprise Quality Management Division

6. The EPA Needs to Improve Risk Communication to Provide Individuals and Communities with Sufficient Information to Make Informed Decisions to Protect their Health and the Environment

Summary of Challenge: *OIG notes that while the Agency has taken important steps to address this important issue, recent audits indicate risk communication challenges across many EPA programs. The OIG believes the Agency needs more effective risk communication strategies to guide, coordinate and evaluate its communication efforts to convey potential hazards. Risk communication tools can be written, verbal or visual statements containing information about risk.*

Agency Response: EPA has established a cross-agency Risk Communication Workgroup charged with institutionalizing a thoughtful, cohesive approach to how EPA plans for, pays for, and conducts risk communication across the Agency. The goal is to identify next steps that will inform and contribute to the development of better risk communications processes, strategies and training. The strategy included hiring a highly experienced Senior Risk Communication Advisor in the Agency. The Agency has taken the following efforts to address this management challenge:

- Issued agencywide questionnaire to survey all EPA offices and regions to identify ongoing risk communications activities, adherence to existing agency risk communications practices, and consistency of practices across offices.
- Distributed agencywide communications plan template that includes consideration of risk communication messaging for all actions.
- Presented risk communications charge to Children's Health Protection Advisory Committee. **A key recommendation of the committee is to**: Know your audience, know who the best messenger is for each audience, and measure and track results.
- Presented risk communications charge to Local Government Advisory Committee. **A key recommendation of the committee is for the Agency to**: Improve relationships with state, local, tribal officials before there is a risk to public health; having these relationships in place in advance will make it easier to coordinate and provide the

public with one consistent message.

- Met with the National Environmental Justice Advisory Committee to establish. **A key recommendation of the committee is to:** Keep lines of communications open and understand that each community is different, which means there is not one-size-fits-all approach to risk communication.
- Coordinated with E-Enterprise Leadership Council to form a new team on risk communications to include state and tribal representatives.
- In EPA's 2019 PFAS Action Plan the Agency committed to developing a risk communication toolbox that includes materials and messaging for federal, state, tribal and local officials to use to inform the public.
- On-boarded a Senior Risk Communication Advisor in 2019.
- The scoping of a cross-agency risk communication portfolio of activities is in process. This portfolio will include inter- and intra-agency collaboration and learning opportunities; the development of content-rich toolkits on priority issues for the Agency using risk communication best practices; the development of a tiered risk communication training system; improved evaluation and research mechanisms.
- Both FTE and extramural funding are needed to develop training and implement risk communications efforts agencywide.
- Continued support from the Risk Communications Workgroup, program offices and regional offices is critical for the Agency's risk communications efforts.

Responsible Agency Officials: Rosemarie Kelley, Director, Office of Civil Enforcement; and Nancy Grantham, Principal Deputy Associate Administrator, Office of Public Affairs

EPA User Fee Programs

In FY 2021, EPA will have several user fee programs in operation. These user fee programs and proposals are referenced below.

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 2023 and raises the collection target by $3.2 million to $31 million.

- **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 2023 and adjusts fee amounts for certain types of registrations. In FY 2021, EPA expects to collect approximately $18 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. The law authorizes the Agency to collect

fee revenues amounting to an estimated 25 percent of the Agency's costs for administering Sections 4, 5, 6 and 14 of TSCA, as amended, and enables the revenues to be deposited in the TSCA Service Fee Fund for direct use by EPA. 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 Risk Evaluations (EPA-Initiated and Manufacturer-Requested) under TSCA Section 6.

EPA finalized a rule implementing these fee collection authorities on September 27, 2018 and began to charge fees on October 1, 2018. FY 2019 fee revenue totaled $2.8 million, all from Section 5 fees. In FY 2020, fee revenues are estimated to be $7.75 million and will come from several sources: $3 million estimated for EPA review of new chemical submissions; $3.75 million for 3 manufacturer-requested risk evaluations (MRREs) for TSCA Work Plan Chemicals; and $1 million estimated for work under TSCA Section 4.

In FY 2021, fee revenues for Section 5 new chemical submissions are estimated to total $3 million and revenues for work under Section 4 are estimated to total $1 million. For Section 6, $27 million fee revenue is expected in the first quarter of FY 2021 following planned publication in June 2020 of Scoping documents for the 20 Section 6 EPA-Initiated Risk Evaluations that were commenced in December 2019. However, if all manufacturers associated with one or more of those chemicals elect and meet the requirements to cease production, estimated fee revenues in this category may not be realized in FY 2021. Additional fees also may be received in FY 2021 for EPA-approved MRREs, which do not count toward the 25 percent statutory cap on TSCA fee collections relative to EPA's costs under TSCA Sections 4, 5, 6 and 14. For planning purposes, EPA is assuming that it will approve 3 MRREs for Work Plan Chemicals in FY 2020 and FY 2021, for which the down-payment fee amount for each is $1.25 million ($3.75 million total for each fiscal year). Payment of remaining portions of 50 percent of EPA's actual costs for those evaluations will not be received until they are completed three years later.

Fee collections from Section 6 EPA-Initiated Risk Evaluations will fluctuate considerably across fiscal years because the initiations will come in batches corresponding to statutory deadlines for the completion of ongoing risk evaluations and the implementation of new evaluations. Each risk evaluation is required by law to be completed within three years, with the option of a six-month extension. Since the Agency is required to have at least 20 risk evaluations ongoing at all times, a new batch of evaluations is expected to be initiated at 3-year intervals, resulting in a spike in fee collections at those times. Despite these fluctuations, the fees are structured to collect up to 25 percent of associated program costs over a three-year average, including agency indirect costs (not counting fees for MRREs, which can recover 50 percent or 100 percent of the actual costs of those evaluations).

- **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 also are paid by manufacturers of heavy-duty and non-road 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 non-road engines. EPA intends to apply certification fees to additional industry sectors as new programs are developed. In FY 2021, EPA expects to collect approximately $23.4 million from this fee program based upon a projection of the original rulemaking cost study adjusted for inflation. EPA is not currently authorized to expend these collected funds but is proposing such authority.

- **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 2021, EPA will continue to operate the e-Manifest system and the Agency anticipates collecting and depositing approximately $26 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.

- **WIFIA Program Fees**

The FY 2021 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 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 $5 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 2021, EPA estimates that $10 million in WIFIA fees could be collected.

Fee Proposals: Other

Motor Vehicle and Engine Compliance Program Fee

The FY 2021 Budget includes a proposal to appropriate a portion of the Federal Vehicle and Fuels Standards and Certification program project funds from the Environmental Services Fund (ESF). This change would more directly reflect the relationship between the Program's fee collections for vehicle and engine certifications and its expenditures as described in the Clean Air Act (42 USC 7552(b)).

- **ENERGY STAR**

By administering the ENERGY STAR program through the collection of user fees, the EPA would continue to provide a trusted resource for consumers and businesses who want to purchase products that save them money and help protect the environment. Product manufacturers who seek to label their products under the Program would pay a fee that would support EPA's work to set voluntary energy efficiency standards and to process applications. The fee collections provide funding to cover an upfront appropriation of $46 million, and continued expenses to develop, operate, and maintain the ENERGY STAR program.

- **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 2021 request carries forward the proposed statutory language from the FY 2020 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.

- **Oil Spill: Prevention, Preparedness, and Response**

The FY 2021 Budget requests authorization for the Administrator to collect and obligate fees to provide compliance assistance services for owners or operators of a non-transportation related onshore or offshore facility located landward of the coastline required to prepare and submit Spill Prevention Control and Countermeasure Plans or Facility Response Plans (FRP) under section 311(j) of the Federal Water Pollution Control Act. There are approximately 3,800 FRP facilities and over 540,000 SPCC facilities. Allowing these facilities to voluntarily request and pay for a service will help expand awareness and understanding of accident prevention processes, improve the safety of industrial operations, and reduce inadvertent regulatory compliance violations. These fees will be deposited in the Inland Oil Spill Programs account and remain available until expended for the expenses of providing compliance assistance services. These fees are discretionary, and the proposed language is included in the Administrative Provisions section. When the Agency receives Congressional authorization, the Administrator will establish procedures for making and accepting a facility's request for voluntary assistance.

- **State and Local Prevention and Preparedness**

The FY 2021 Budget requests authorization for the Administrator to collect and obligate fees to provide compliance assistance services for owners or operators of a stationary source required to prepare and submit a Risk Management Plan (RMP) under Section 112(r)(7) of the Clean Air Act. There are approximately 12,000 RMP facilities. Allowing these facilities to voluntarily request and pay for a service will help expand awareness and understanding of accident prevention processes, improve the safety of industrial operations, and reduce inadvertent regulatory compliance violations. These fees will be deposited in the Environmental Programs and Management account and remain available until September 30, 2022 for the expenses of providing compliance assistance services. These fees are discretionary, and the proposed language is included in the Administrative Provisions section. When the Agency receives Congressional authorization, the Administrator will establish procedures for making and accepting a facility's request for voluntary assistance.

Working Capital Fund

In FY 2021, the Agency will be in its 25th 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. 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) Act[3] provided additional authority for information technology development activities in agency working capital funds.[4]

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 2021, there will be 10 agency activities provided under the WCF. These are the Agency's information technology, telecommunications operations, data services, agency postage costs, Cincinnati voice services, and background investigations managed by the Office of Mission Support; financial and administrative systems, employee relocations, and a budget formulation system managed by the Chief Financial Officer; the Agency's Continuity of Operations (COOP) site managed by the Land and Emergency Management program; regional information technology service and support managed by EPA Region 8; and a legal services activity managed by the Office of General Counsel.[5]

The Agency's FY 2021 budget request includes resources for these 10 activities in each National Program Manager's submission, totaling approximately $270 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 2021, the Agency will continue to perform relocation services for other federal agencies in an effort to deliver high quality services external to EPA.

It is anticipated in FY 2021 that there may be minor increases and decreases due to several IT improvements, including increased cloud computing, cybersecurity requirements, continuous diagnostic and mitigation program implementation, and discovery services. Other funding shifts have been included in the FY 2021 WCF plan that relate to the necessary telecommunications and

[3] The MGT Act was enacted as part of the Fiscal Year 2018 National Defense Authorization Act on December 12, 2017.
[4] 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.
[5] In August 2019, the WCF Board approved the creation of the legal services activity to begin in FY 2020, which includes certain important central functions such as Freedom of Information Act (FOIA) management and ethics oversight activities with their supporting systems.

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.

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.

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

APA: Administrative Procedures Act

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)

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

DPA: Deepwater Ports Act

DREAA: Disaster Relief and Emergency Assistance Act

ECRA: Economic Cleanup Responsibility Act

EFOIA: Electronic Freedom of Information Act

EISA: Energy Independence and Security Act of 2007

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)

ERD&DAA: 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

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)

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

IPA: Intergovernmental Personnel Act

IPIA: Improper Payments Information Act

ISTEA: Intermodal Surface Transportation Efficiency Act

ITMRA: Information Technology Management Reform Act of 1996-aka Clinger/Cohen Act

MPPRCA: Marine Plastic Pollution, Research and Control Act of 1987

MPRSA: Marine Protection Research and Sanctuaries Act

NAWCA: North American Wetlands Conservation 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

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

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

FY 2021 STAG Categorical Grant Programs
Statutory Authority and Eligible Uses
(Dollars in Thousands)

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2019 Actual Dollars (X1000)	Estimated FY 2020 Enacted Dollars[6] (X1000)	FY 2021 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.	Goal 1, Obj. 1.1	$41,875.0	$41,968.0	$29,313.0
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.	Goal 1, Obj. 1.1	$4,019.0	$4,959.0	$6,271.0
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.	Goal 1, Obj. 1.1	$3,102.2	$4,772.0	$2,780.0

[6] Does not reflect STAG rescissions.

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2019 Actual Dollars (X1000)	Estimated FY 2020 Enacted Dollars[6] (X1000)	FY 2021 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; Multi-jurisdictional 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 PM 2.5 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).	Goal 1, Obj. 1.1	$170,239.0 Section 105 grants _____ $639.0 Section 106 grants **Total:** **$219,874.2**	$175,881.0 Section 105 grants _____ $639.0 Section 106 grants **Total:** **$228,219.0**	$113,177.0 Section 105 grants _____ $420.0 Section 106 grants **Total:** **$151,961.0**

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2019 Actual Dollars (X1000)	Estimated FY 2020 Enacted Dollars[6] (X1000)	FY 2021 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.	Goal 1, Obj. 1.1	$8,556.1 Section 103 grants $4,000.0 Section 105 grants **Total: $12,556.1**	$8,829.0 Section 103 grants $4,000.0 Section 105 grants **Total: $12,829.0**	$6,163.0 Section 103 grants $2,800.0 Section 105 grants **Total: $8,963.0**
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.	Goal 1, Obj. 1.1	$7,453.4	$7,789.0	$0.0
Multipurpose Grants	Appropriation Act: FY 2018 (Public Law 115-141) and 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.	Goal 2 Obj.: *2.1*	$0.0	$13,000.0	$10,000.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2019 Actual Dollars (X1000)	Estimated FY 2020 Enacted Dollars[6] (X1000)	FY 2021 President's Budget Dollars (X1000)
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.	Goal 1, Obj. 1.2	$225,454.2	$223,289.0	$153,683.0
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.	Goal 1, Obj. 1.2	$166,360.0	$172,348.0	$0.0
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.	Goal 1, Obj. 1.2	$12,772.7	$14,183.0	$9,762.0
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.	Goal 1, Obj. 1.2	$96,689.7	$106,250.0	$67,892.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2019 Actual Dollars (X1000)	Estimated FY 2020 Enacted Dollars[6] (X1000)	FY 2021 President's Budget Dollars (X1000)
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.	Goal 1, Obj. 1.2	$9,846.2	$10,164.0	$6,995.0
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.	Goal, Obj. 1.2	$8,985.0	$9,238.0	$0.0
HABs Reduction Grant	Clean Water Act		Prevention and response efforts for harmful algal blooms.	Goal, Obj. 1.2	$0.0	$0.0	$15,000.0
Hazardous Waste Financial Assistance	Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act § 3011; Appropriation Act: FY 2018 (Public Law 115-141).	States, Tribes, Intertribal Consortia	Development & Implementation of Hazardous Waste Programs	Goal 1, Obj. 1.3	$101,345.0	$96,446.0	$66,381.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2019 Actual Dollars (X1000)	Estimated FY 2020 Enacted Dollars[6] (X1000)	FY 2021 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.	Goal 1, Obj. 1.3	$49,769.5	$46,190.0	$31,791.0
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.	Goal 1, Obj. 1.3	$1,590.1	$1,449.0	$0.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2019 Actual Dollars (X1000)	Estimated FY 2020 Enacted Dollars[6] (X1000)	FY 2021 President's Budget Dollars (X1000)
Pesticides Program Implementation	FIFRA, Sections 23(a)(1); Federal Food, drug and Cosmetic Act (FDCA); 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.	Goal 1, Obj. 1.4	$11,821.5 – States formula _____ $613.9 HQ Programs: - Tribal - PREP - School IPM _____ **Total: $12,435.4**	$11,051.0 – States formula _____ $1,236.0 HQ Programs: - Tribal - PREP - School IPM _____ **Total: $12,287.0**	$7,350.0 – States formula _____ $1,107.0 HQ Programs: - Tribal - PREP - Pollinator Protection _____ **Total: $8,457.0**
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. The 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.	Goal 1, Obj. 1.4	$11,576.9 404(g) State/ Tribal Certification _____ $1,714.1 404(g) Direct Implementation **Total:** **$13,291.0**	$12,384.0 404(g) State/ Tribal Certification _____ $1,665.0 404(g) Direct Implementation **Total:** **$14,049.0**	$8,815.0 404(g) State/ Tribal Certification _____ $1,185.0 404(g) Direct Implementation **Total:** **$10,000.0**

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2019 Actual Dollars (X1000)	Estimated FY 2020 Enacted Dollars[6] (X1000)	FY 2021 President's Budget Dollars (X1000)
Toxic Substances Compliance	Toxic Substances Control Act; 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.	Goal 2, Obj. 2.1	$4,597.4	$4,759.0	$3,276.0
Pesticide Enforcement	FIFRA § 23(a)(1); FY2000 Appropriations Act (P.L. 106-74); 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.	Goal 2, Obj. 2.1	$17,510.6	$24,000.0	$10,531.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2019 Actual Dollars (X1000)	Estimated FY 2020 Enacted Dollars[6] (X1000)	FY 2021 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.e.*, 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.	Goal 2, Obj. 2.1	$5,545.5	$4,610.0	$0.0
Tribal General Assistance Program	Indian Environmental General Assistance Program Act (42 U.S.C. § 4368b); TCA in annual Appropriations Acts.	Tribal Governments, Intertribal Consortia	Plan and develop Tribal environmental protection programs.	Goal 2, Obj. 2.1	$67,299.0	$65,476.0	$44,233.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2020 Goal/Objective	FY 2019 Actual Dollars (X1000)	Estimated FY 2020 Enacted Dollars[6] (X1000)	FY 2021 President's Budget Dollars (X1000)
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) Appropriation Act: FY 2018 (Public Law 115-141)	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.	Goal 3, Obj. 3.4	$9,619.7	$9,332.0	$6,422.0

Program Project By Program Area

(Dollars in Thousands)

Science & Technology	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Clean Air				
Clean Air Allowance Trading Programs	$7,834.8	$7,463.0	$5,739.0	-$1,724.0
Atmospheric Protection Program	$8,044.4	$7,772.0	$0.0	-$7,772.0
Federal Support for Air Quality Management	$10,878.2	$6,039.0	$3,712.0	-$2,327.0
Federal Vehicle and Fuels Standards and Certification	$92,789.2	$94,790.0	$80,932.0	-$13,858.0
Subtotal, Clean Air	**$119,546.6**	**$116,064.0**	**$90,383.0**	**-$25,681.0**
Indoor Air and Radiation				
Indoor Air: Radon Program	$16.7	$143.0	$0.0	-$143.0
Radiation: Protection	$2,794.7	$1,781.0	$1,047.0	-$734.0
Radiation: Response Preparedness	$2,545.0	$3,089.0	$4,167.0	$1,078.0
Reduce Risks from Indoor Air	$216.7	$136.0	$0.0	-$136.0
Subtotal, Indoor Air and Radiation	**$5,573.1**	**$5,149.0**	**$5,214.0**	**$65.0**
Enforcement				
Forensics Support	$11,534.7	$13,592.0	$11,723.0	-$1,869.0
Homeland Security				
Homeland Security: Critical Infrastructure Protection	$7,957.5	$9,053.0	$7,732.0	-$1,321.0
Homeland Security: Preparedness, Response, and Recovery	$20,492.7	$23,593.0	$25,542.0	$1,949.0
Homeland Security: Protection of EPA Personnel and Infrastructure	$410.0	$443.0	$500.0	$57.0
Subtotal, Homeland Security	**$28,860.2**	**$33,089.0**	**$33,774.0**	**$685.0**
IT / Data Management / Security				
IT / Data Management	$3,092.6	$3,072.0	$2,890.0	-$182.0
Operations and Administration				
Facilities Infrastructure and Operations	$67,856.9	$65,372.0	$67,908.0	$2,536.0
Pesticides Licensing				
Pesticides: Protect Human Health from Pesticide Risk	$3,098.5	$3,154.0	$2,443.0	-$711.0
Pesticides: Protect the Environment from Pesticide Risk	$2,415.8	$2,327.0	$2,616.0	$289.0
Pesticides: Realize the Value of Pesticide Availability	$354.6	$405.0	$684.0	$279.0
Subtotal, Pesticides Licensing	**$5,868.9**	**$5,886.0**	**$5,743.0**	**-$143.0**

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Research: Air and Energy				
Research: Air and Energy	$85,895.8	$94,496.0	$33,543.0	-$60,953.0
Research: Safe and Sustainable Water Resources				
Research: Safe and Sustainable Water Resources	$100,123.7	$110,890.0	$78,948.0	-$31,942.0
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$135,083.1	$132,477.0	$58,597.0	-$73,880.0
Research: Chemical Safety for Sustainability				
Health and Environmental Risk Assessment	$37,003.7	$37,351.0	$24,694.0	-$12,657.0
Research: Chemical Safety for Sustainability				
Endocrine Disruptors	$15,230.0	$16,021.0	$10,775.0	-$5,246.0
Computational Toxicology	$22,262.3	$21,089.0	$18,181.0	-$2,908.0
Research: Chemical Safety for Sustainability (other activities)	$49,811.9	$51,807.0	$37,996.0	-$13,811.0
Subtotal, Research: Chemical Safety for Sustainability	$87,304.2	$88,917.0	$66,952.0	-$21,965.0
Subtotal, Research: Chemical Safety for Sustainability	**$124,307.9**	**$126,268.0**	**$91,646.0**	**-$34,622.0**
Water: Human Health Protection				
Drinking Water Programs	$3,227.6	$4,094.0	$4,364.0	$270.0
Congressional Priorities				
Water Quality Research and Support Grants	$4,092.0	$6,000.0	$0.0	-$6,000.0
Total, Science & Technology	**$695,063.1**	**$716,449.0**	**$484,733.0**	**-$231,716.0**
Environmental Programs & Management				
Clean Air				
Clean Air Allowance Trading Programs	$15,302.4	$13,619.0	$13,231.0	-$388.0
Atmospheric Protection Program	$90,985.1	$95,436.0	$14,512.0	-$80,924.0
Federal Stationary Source Regulations	$19,279.9	$20,093.0	$17,877.0	-$2,216.0
Federal Support for Air Quality Management	$132,513.9	$130,588.0	$114,095.0	-$16,493.0
Stratospheric Ozone: Domestic Programs	$5,060.4	$4,661.0	$4,087.0	-$574.0
Stratospheric Ozone: Multilateral Fund	$8,326.0	$8,711.0	$0.0	-$8,711.0
Subtotal, Clean Air	**$271,467.7**	**$273,108.0**	**$163,802.0**	**-$109,306.0**
Indoor Air and Radiation				
Indoor Air: Radon Program	$2,642.6	$3,136.0	$0.0	-$3,136.0
Radiation: Protection	$10,880.5	$7,992.0	$2,470.0	-$5,522.0
Radiation: Response Preparedness	$2,078.1	$2,196.0	$2,350.0	$154.0

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Reduce Risks from Indoor Air	$10,931.6	$11,627.0	$0.0	-$11,627.0
Subtotal, Indoor Air and Radiation	**$26,532.8**	**$24,951.0**	**$4,820.0**	**-$20,131.0**
Brownfields				
Brownfields	$22,939.3	$23,647.0	$17,816.0	-$5,831.0
Compliance				
Compliance Monitoring	$100,132.8	$101,665.0	$95,649.0	-$6,016.0
Enforcement				
Civil Enforcement	$160,202.2	$167,615.0	$157,820.0	-$9,795.0
Criminal Enforcement	$46,342.0	$47,635.0	$46,627.0	-$1,008.0
Environmental Justice	$5,033.5	$9,554.0	$2,729.0	-$6,825.0
NEPA Implementation	$13,827.4	$15,833.0	$17,937.0	$2,104.0
Subtotal, Enforcement	**$225,405.1**	**$240,637.0**	**$225,113.0**	**-$15,524.0**
Geographic Programs				
Geographic Program: Chesapeake Bay	$72,800.7	$85,000.0	$7,300.0	-$77,700.0
Geographic Program: Gulf of Mexico	$17,690.4	$17,553.0	$0.0	-$17,553.0
Geographic Program: Lake Champlain	$10,995.0	$13,390.0	$0.0	-$13,390.0
Geographic Program: Long Island Sound	$14,232.7	$21,000.0	$0.0	-$21,000.0
Geographic Program: Other				
Lake Pontchartrain	$947.0	$1,089.0	$0.0	-$1,089.0
S.New England Estuary (SNEE)	$4,842.8	$5,741.0	$0.0	-$5,741.0
Geographic Program: Other (other activities)	$1,401.5	$2,736.0	$0.0	-$2,736.0
Subtotal, Geographic Program: Other	$7,191.3	$9,566.0	$0.0	-$9,566.0
Great Lakes Restoration	$292,571.0	$320,000.0	$320,000.0	$0.0
Geographic Program: South Florida	$1,305.2	$4,845.0	$3,206.0	-$1,639.0
Geographic Program: San Francisco Bay	$8,381.7	$5,922.0	$0.0	-$5,922.0
Geographic Program: Puget Sound	$27,936.8	$33,000.0	$0.0	-$33,000.0
Subtotal, Geographic Programs	**$453,104.8**	**$510,276.0**	**$330,506.0**	**-$179,770.0**
Homeland Security				
Homeland Security: Communication and Information	$4,003.8	$3,818.0	$3,677.0	-$141.0
Homeland Security: Critical Infrastructure Protection	$444.4	$840.0	$1,361.0	$521.0
Homeland Security: Protection of EPA Personnel and Infrastructure	$5,755.6	$5,355.0	$4,986.0	-$369.0
Subtotal, Homeland Security	**$10,203.8**	**$10,013.0**	**$10,024.0**	**$11.0**
Information Exchange / Outreach				
State and Local Prevention and Preparedness	$12,588.0	$13,594.0	$10,862.0	-$2,732.0
TRI / Right to Know	$12,136.9	$12,155.0	$8,065.0	-$4,090.0

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Tribal - Capacity Building	$13,780.0	$13,072.0	$14,099.0	$1,027.0
Executive Management and Operations	$51,243.2	$47,259.0	$43,784.0	-$3,475.0
Environmental Education	$8,597.1	$8,580.0	$0.0	-$8,580.0
Exchange Network	$17,090.3	$15,184.0	$12,328.0	-$2,856.0
Small Minority Business Assistance	$1,411.3	$987.0	$1,080.0	$93.0
Small Business Ombudsman	$1,906.9	$1,824.0	$1,983.0	$159.0
Children and Other Sensitive Populations: Agency Coordination	$5,903.7	$6,173.0	$2,704.0	-$3,469.0
Subtotal, Information Exchange / Outreach	**$124,657.4**	**$118,828.0**	**$94,905.0**	**-$23,923.0**
International Programs				
US Mexico Border	$3,236.0	$2,693.0	$0.0	-$2,693.0
International Sources of Pollution	$7,011.4	$6,553.0	$10,628.0	$4,075.0
Trade and Governance	$5,716.8	$5,365.0	$0.0	-$5,365.0
Subtotal, International Programs	**$15,964.2**	**$14,611.0**	**$10,628.0**	**-$3,983.0**
IT / Data Management / Security				
Information Security	$7,649.5	$7,593.0	$14,012.0	$6,419.0
IT / Data Management	$78,748.7	$80,223.0	$79,064.0	-$1,159.0
Subtotal, IT / Data Management / Security	**$86,398.2**	**$87,816.0**	**$93,076.0**	**$5,260.0**
Legal / Science / Regulatory / Economic Review				
Integrated Environmental Strategies	$10,760.9	$10,152.0	$14,200.0	$4,048.0
Administrative Law	$4,527.9	$4,835.0	$5,104.0	$269.0
Alternative Dispute Resolution	$667.4	$870.0	$0.0	-$870.0
Civil Rights Program	$8,972.5	$8,814.0	$9,780.0	$966.0
Legal Advice: Environmental Program	$51,526.8	$47,978.0	$50,263.0	$2,285.0
Legal Advice: Support Program	$14,926.0	$14,478.0	$18,082.0	$3,604.0
Regional Science and Technology	$1,224.3	$808.0	$0.0	-$808.0
Science Advisory Board	$3,154.5	$3,214.0	$4,031.0	$817.0
Regulatory/Economic-Management and Analysis	$12,616.7	$13,094.0	$17,294.0	$4,200.0
Subtotal, Legal / Science / Regulatory / Economic Review	**$108,377.0**	**$104,243.0**	**$118,754.0**	**$14,511.0**
Operations and Administration				
Central Planning, Budgeting, and Finance	$72,920.6	$71,423.0	$76,603.0	$5,180.0
Facilities Infrastructure and Operations	$321,500.4	$287,595.0	$317,345.0	$29,750.0
Acquisition Management	$33,799.8	$30,945.0	$29,621.0	-$1,324.0
Human Resources Management	$43,339.9	$41,556.0	$44,538.0	$2,982.0
Financial Assistance Grants / IAG Management	$23,794.8	$23,802.0	$21,452.0	-$2,350.0
Subtotal, Operations and Administration	**$495,355.5**	**$455,321.0**	**$489,559.0**	**$34,238.0**
Pesticides Licensing				

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Science Policy and Biotechnology	$1,823.4	$1,605.0	$0.0	-$1,605.0
Pesticides: Protect Human Health from Pesticide Risk	$55,368.2	$58,753.0	$51,268.0	-$7,485.0
Pesticides: Protect the Environment from Pesticide Risk	$39,444.2	$38,966.0	$32,100.0	-$6,866.0
Pesticides: Realize the Value of Pesticide Availability	$7,193.6	$7,722.0	$6,014.0	-$1,708.0
Subtotal, Pesticides Licensing	**$103,829.4**	**$107,046.0**	**$89,382.0**	**-$17,664.0**
Research: Chemical Safety for Sustainability				
Research: Chemical Safety for Sustainability	$131.9	$0.0	$0.0	$0.0
Resource Conservation and Recovery Act (RCRA)				
RCRA: Corrective Action	$34,554.0	$36,973.0	$35,126.0	-$1,847.0
RCRA: Waste Management	$58,728.3	$66,819.0	$50,399.0	-$16,420.0
RCRA: Waste Minimization & Recycling	$8,840.2	$8,997.0	$4,253.0	-$4,744.0
Subtotal, Resource Conservation and Recovery Act (RCRA)	**$102,122.5**	**$112,789.0**	**$89,778.0**	**-$23,011.0**
Toxics Risk Review and Prevention				
Endocrine Disruptors	$8,178.1	$7,533.0	$0.0	-$7,533.0
Pollution Prevention Program	$11,657.5	$11,127.0	$0.0	-$11,127.0
Toxic Substances: Chemical Risk Review and Reduction	$64,241.5	$60,488.0	$69,004.0	$8,516.0
Toxic Substances: Lead Risk Reduction Program	$11,663.0	$11,567.0	$0.0	-$11,567.0
Subtotal, Toxics Risk Review and Prevention	**$95,740.1**	**$90,715.0**	**$69,004.0**	**-$21,711.0**
Underground Storage Tanks (LUST / UST)				
LUST / UST	$11,089.8	$10,750.0	$6,863.0	-$3,887.0
Water: Ecosystems				
National Estuary Program / Coastal Waterways	$26,425.7	$29,823.0	$0.0	-$29,823.0
Wetlands	$17,234.9	$19,241.0	$22,604.0	$3,363.0
Subtotal, Water: Ecosystems	**$43,660.6**	**$49,064.0**	**$22,604.0**	**-$26,460.0**
Water: Human Health Protection				
Beach / Fish Programs	$1,490.8	$1,584.0	$0.0	-$1,584.0
Drinking Water Programs	$92,373.1	$100,903.0	$97,462.0	-$3,441.0
Subtotal, Water: Human Health Protection	**$93,863.9**	**$102,487.0**	**$97,462.0**	**-$5,025.0**
Water Quality Protection				
Marine Pollution	$9,349.3	$9,258.0	$4,680.0	-$4,578.0
Surface Water Protection	$196,146.1	$198,431.0	$201,799.0	$3,368.0
Subtotal, Water Quality Protection	**$205,495.4**	**$207,689.0**	**$206,479.0**	**-$1,210.0**
Congressional Priorities				
Water Quality Research and Support Grants	$0.0	$17,700.0	$0.0	-$17,700.0

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Total, Environmental Programs & Management	**$2,596,472.2**	**$2,663,356.0**	**$2,236,224.0**	**-$427,132.0**
Inspector General				
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	$39,929.8	$41,489.0	$39,825.0	-$1,664.0
Total, Inspector General	**$39,929.8**	**$41,489.0**	**$39,825.0**	**-$1,664.0**
Building and Facilities				
Homeland Security				
Homeland Security: Protection of EPA Personnel and Infrastructure	$4,259.1	$6,676.0	$6,176.0	-$500.0
Operations and Administration				
Facilities Infrastructure and Operations	$23,017.8	$26,922.0	$33,377.0	$6,455.0
Total, Building and Facilities	**$27,276.9**	**$33,598.0**	**$39,553.0**	**$5,955.0**
Hazardous Substance Superfund				
Indoor Air and Radiation				
Radiation: Protection	$1,768.6	$1,985.0	$2,122.0	$137.0
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	$8,875.9	$11,586.0	$9,747.0	-$1,839.0
Compliance				
Compliance Monitoring	$1,313.8	$995.0	$1,004.0	$9.0
Enforcement				
Criminal Enforcement	$7,492.9	$7,645.0	$8,479.0	$834.0
Environmental Justice	$662.2	$633.0	$0.0	-$633.0
Forensics Support	$1,402.3	$1,145.0	$1,312.0	$167.0
Superfund: Enforcement	$135,626.7	$152,591.0	$162,504.0	$9,913.0
Superfund: Federal Facilities Enforcement	$6,046.9	$6,361.0	$7,330.0	$969.0
Subtotal, Enforcement	**$151,231.0**	**$168,375.0**	**$179,625.0**	**$11,250.0**
Homeland Security				
Homeland Security: Preparedness, Response, and Recovery	$31,526.7	$31,599.0	$33,454.0	$1,855.0
Homeland Security: Protection of EPA Personnel and Infrastructure	$979.3	$1,017.0	$915.0	-$102.0
Subtotal, Homeland Security	**$32,506.0**	**$32,616.0**	**$34,369.0**	**$1,753.0**

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Information Exchange / Outreach				
Exchange Network	$1,424.8	$1,328.0	$1,293.0	-$35.0
IT / Data Management / Security				
Information Security	$598.9	$693.0	$5,082.0	$4,389.0
IT / Data Management	$13,755.5	$13,792.0	$13,874.0	$82.0
Subtotal, IT / Data Management / Security	**$14,354.4**	**$14,485.0**	**$18,956.0**	**$4,471.0**
Legal / Science / Regulatory / Economic Review				
Alternative Dispute Resolution	$573.3	$710.0	$0.0	-$710.0
Legal Advice: Environmental Program	$515.0	$543.0	$608.0	$65.0
Subtotal, Legal / Science / Regulatory / Economic Review	**$1,088.3**	**$1,253.0**	**$608.0**	**-$645.0**
Operations and Administration				
Central Planning, Budgeting, and Finance	$23,772.7	$21,971.0	$22,462.0	$491.0
Facilities Infrastructure and Operations	$82,243.2	$76,473.0	$76,831.0	$358.0
Acquisition Management	$18,593.2	$20,533.0	$22,982.0	$2,449.0
Human Resources Management	$6,163.7	$6,548.0	$5,704.0	-$844.0
Financial Assistance Grants / IAG Management	$2,517.7	$2,580.0	$2,903.0	$323.0
Subtotal, Operations and Administration	**$133,290.5**	**$128,105.0**	**$130,882.0**	**$2,777.0**
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$11,004.7	$16,463.0	$11,448.0	-$5,015.0
Research: Chemical Safety for Sustainability				
Health and Environmental Risk Assessment	$2,864.9	$12,824.0	$6,159.0	-$6,665.0
Superfund Cleanup				
Superfund: Emergency Response and Removal	$215,077.1	$189,306.0	$170,748.0	-$18,558.0
Superfund: EPA Emergency Preparedness	$7,679.9	$7,636.0	$7,700.0	$64.0
Superfund: Federal Facilities	$22,544.5	$21,125.0	$21,621.0	$496.0
Superfund: Remedial	$604,659.0	$576,673.0	$482,329.0	-$94,344.0
Subtotal, Superfund Cleanup	**$849,960.5**	**$794,740.0**	**$682,398.0**	**-$112,342.0**
Total, Hazardous Substance Superfund	**$1,209,683.4**	**$1,184,755.0**	**$1,078,611.0**	**-$106,144.0**
Leaking Underground Storage Tanks				
Enforcement				
Civil Enforcement	$678.1	$620.0	$541.0	-$79.0
Operations and Administration				
Central Planning, Budgeting, and Finance	$258.3	$321.0	$450.0	$129.0

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Facilities Infrastructure and Operations	$847.2	$868.0	$796.0	-$72.0
Acquisition Management	$70.2	$163.0	$138.0	-$25.0
Subtotal, Operations and Administration	**$1,175.7**	**$1,352.0**	**$1,384.0**	**$32.0**
Underground Storage Tanks (LUST / UST)				
LUST / UST	$10,133.9	$9,240.0	$7,149.0	-$2,091.0
LUST Cooperative Agreements	$59,225.6	$55,040.0	$38,840.0	-$16,200.0
LUST Prevention	$26,829.1	$25,369.0	$0.0	-$25,369.0
Subtotal, Underground Storage Tanks (LUST / UST)	**$96,188.6**	**$89,649.0**	**$45,989.0**	**-$43,660.0**
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$130.5	$320.0	$304.0	-$16.0
Total, Leaking Underground Storage Tanks	**$98,172.9**	**$91,941.0**	**$48,218.0**	**-$43,723.0**
Inland Oil Spill Programs				
Compliance				
Compliance Monitoring	$82.8	$139.0	$0.0	-$139.0
Enforcement				
Civil Enforcement	$2,393.3	$2,413.0	$2,462.0	$49.0
Oil				
Oil Spill: Prevention, Preparedness and Response	$13,715.1	$15,700.0	$12,965.0	-$2,735.0
Operations and Administration				
Facilities Infrastructure and Operations	$577.3	$665.0	$682.0	$17.0
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$599.6	$664.0	$522.0	-$142.0
Total, Inland Oil Spill Programs	**$17,368.1**	**$19,581.0**	**$16,631.0**	**-$2,950.0**
State and Tribal Assistance Grants				
State and Tribal Assistance Grants (STAG)				
Infrastructure Assistance: Alaska Native Villages	$24,469.5	$29,186.0	$3,000.0	-$26,186.0
Brownfields Projects	$91,319.3	$89,000.0	$80,000.0	-$9,000.0
Infrastructure Assistance: Clean Water SRF	$1,625,444.5	$1,638,826.0	$1,119,778.0	-$519,048.0
Infrastructure Assistance: Drinking Water SRF	$1,131,822.3	$1,126,088.0	$863,235.0	-$262,853.0
Infrastructure Assistance: Mexico Border	$14,653.9	$25,000.0	$0.0	-$25,000.0
Diesel Emissions Reduction Grant Program	$99,701.8	$87,000.0	$10,000.0	-$77,000.0
Targeted Airshed Grants	$31,736.7	$56,306.0	$0.0	-$56,306.0

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Gold King Mine Water Monitoring	$4,687.3	$4,000.0	$0.0	-$4,000.0
Safe Water for Small & Disadvantaged Communities	$167.0	$25,408.0	$0.0	-$25,408.0
Reducing Lead in Drinking Water	$62.0	$19,511.0	$20,000.0	$489.0
Lead Testing in Schools	$995.0	$26,000.0	$15,000.0	-$11,000.0
Healthy Schools	$0.0	$0.0	$50,000.0	$50,000.0
Drinking Water Infrastructure Resilience and Sustainability	$0.0	$3,000.0	$2,000.0	-$1,000.0
Drinking Fountain Lead Testing	$0.0	$0.0	$10,000.0	$10,000.0
Technical Assistance for Treatment Works	$0.0	$12,000.0	$7,500.0	-$4,500.0
Sewer Overflow Control Grants	$0.0	$28,000.0	$61,450.0	$33,450.0
Water Infrastructure and Workforce Investment	$0.0	$1,000.0	$1,000.0	$0.0
Subtotal, State and Tribal Assistance Grants (STAG)	**$3,025,059.3**	**$3,170,325.0**	**$2,242,963.0**	**-$927,362.0**
Categorical Grants				
Categorical Grant: Nonpoint Source (Sec. 319)	$166,360.0	$172,348.0	$0.0	-$172,348.0
Categorical Grant: Public Water System Supervision (PWSS)	$96,689.7	$106,250.0	$67,892.0	-$38,358.0
Categorical Grant: State and Local Air Quality Management	$219,874.2	$228,219.0	$151,961.0	-$76,258.0
Categorical Grant: Radon	$7,453.4	$7,789.0	$0.0	-$7,789.0
Categorical Grant: Pollution Control (Sec. 106)				
Monitoring Grants	$17,925.5	$17,267.0	$11,884.0	-$5,383.0
Categorical Grant: Pollution Control (Sec. 106) (other activities)	$207,528.7	$206,022.0	$141,799.0	-$64,223.0
Subtotal, Categorical Grant: Pollution Control (Sec. 106)	$225,454.2	$223,289.0	$153,683.0	-$69,606.0
Categorical Grant: Wetlands Program Development	$12,772.7	$14,183.0	$9,762.0	-$4,421.0
Categorical Grant: Underground Injection Control (UIC)	$9,846.2	$10,164.0	$6,995.0	-$3,169.0
Categorical Grant: Pesticides Program Implementation	$12,435.4	$12,287.0	$8,457.0	-$3,830.0
Categorical Grant: Lead	$13,291.0	$14,049.0	$10,000.0	-$4,049.0
Categorical Grant: Hazardous Waste Financial Assistance	$101,345.0	$96,446.0	$66,381.0	-$30,065.0
Categorical Grant: Pesticides Enforcement	$17,510.6	$24,000.0	$10,531.0	-$13,469.0
Categorical Grant: Pollution Prevention	$5,545.5	$4,610.0	$0.0	-$4,610.0
Categorical Grant: Toxics Substances Compliance	$4,597.4	$4,759.0	$3,276.0	-$1,483.0
Categorical Grant: Tribal General Assistance Program	$67,299.0	$65,476.0	$44,233.0	-$21,243.0
Categorical Grant: Underground Storage Tanks	$1,590.1	$1,449.0	$0.0	-$1,449.0
Categorical Grant: Tribal Air Quality Management	$12,556.1	$12,829.0	$8,963.0	-$3,866.0
Categorical Grant: Environmental Information	$9,619.7	$9,332.0	$6,422.0	-$2,910.0
Categorical Grant: Beaches Protection	$8,985.0	$9,238.0	$0.0	-$9,238.0
Categorical Grant: Brownfields	$49,769.5	$46,190.0	$31,791.0	-$14,399.0
Categorical Grant: Multipurpose Grants	$0.0	$13,000.0	$10,000.0	-$3,000.0

	FY 2019 Actuals	Estimated FY 2020 Enacted	FY 2021 Pres Budget	FY 2021 Pres Budget v. Estimated FY 2020 Enacted
Categorical Grant: Nutrients and Harmful Algal Blooms Reduction Grants	$0.0	$0.0	$15,000.0	$15,000.0
Subtotal, Categorical Grants	**$1,042,994.7**	**$1,075,907.0**	**$605,347.0**	**-$470,560.0**
Congressional Priorities				
Congressionally Mandated Projects	$619.6	$0.0	$0.0	$0.0
Total, State and Tribal Assistance Grants	**$4,068,673.6**	**$4,246,232.0**	**$2,848,310.0**	**-$1,397,922.0**
Hazardous Waste Electronic Manifest System Fund				
Resource Conservation and Recovery Act (RCRA)				
RCRA: Waste Management	$14,485.5	$0.0	$0.0	$0.0
Total, Hazardous Waste Electronic Manifest System Fund	**$14,485.5**	**$0.0**	**$0.0**	**$0.0**
Water Infrastructure Finance and Innovation Fund				
Water Quality Protection				
Water Infrastructure Finance and Innovation	$32,565.9	$60,000.0	$25,023.0	-$34,977.0
Total, Water Infrastructure Finance and Innovation Fund	**$32,565.9**	**$60,000.0**	**$25,023.0**	**-$34,977.0**
Subtotal, EPA	**$8,799,691.4**	**$9,057,401.0**	**$6,817,128.0**	**-$2,240,273.0**
Cancellation of Funds	$0.0	$0.0	-$159,057.0	-$159,057.0
TOTAL, EPA	**$8,799,691.4**	**$9,057,401.0**	**$6,658,071.0**	**-$2,399,330.0**

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

Eliminated Programs

Eliminated Program/Projects

Alternative Dispute Resolution (Estimated FY 2020 Enacted: $1.6 M, 5.9 FTE)
This program provides alternative dispute resolution (ADR) services to EPA Headquarters, EPA Regional Offices, and external stakeholders. This elimination of funding reflects the centralization of conflict prevention and the ADR program. Programs across the Agency may pursue ADR support services and training individually.

Beach / Fish Programs (Estimated FY 2020 Enacted: $1.6 M, 3.2 FTE)
This program provides science, guidance, technical assistance and nationwide information to state, Tribal, and federal agencies on the human health risks associated with eating locally caught fish/shellfish or wildlife with excessive levels of contaminants, as well as beach monitoring and notification programs. The Agency will encourage states to continue this work within ongoing core programs.

Categorical Grant: Beaches Protection (Estimated FY 2020 Enacted: $9.2 M, 0.0 FTE)
Grants authorized under the BEACH Act support continued development and implementation of coastal recreational water monitoring and public notification programs. After over 17 years of technical guidance and financial support, state and local governments now have the technical expertise and procedures to continue beach monitoring without federal support.

Categorical Grant: Nonpoint Source (Sec. 319) (Estimated FY 2020 Enacted: $172.3 M, 0.0 FTE)
This program provides grants to assist states and tribes in implementing approved elements of Nonpoint Source Programs including: regulatory and non-regulatory programs, technical assistance, financial assistance, education, training, technology transfers, and demonstration projects. The Agency will continue to coordinate with the United States Department of Agriculture to target funding, where appropriate, to address nonpoint sources.

Categorical Grant: Pollution Prevention (Estimated FY 2020 Enacted: $4.6 M, 0.0 FTE)
The Pollution Prevention (P2) program is a tool for advancing environmental stewardship by federal, state and Tribal governments, businesses, communities and individuals. In FY 2021, EPA will focus its resources on core statutory environmental work.

Categorical Grant: Radon (Estimated FY 2020 Enacted: $7.8 M, 0.0 FTE)
The Program provides funding for the development of state radon programs and disseminates public information and educational materials. The program also provides information on equipment training, data storage and management, and toll-free hotlines. For over 30 years, EPA's radon program has provided important guidance and funding to help states establish their own programs. States could elect to maintain core program work by using state resources rather than using federal resources.

Categorical Grant: Underground Storage Tanks (Estimated FY 2020 Enacted: $1.5 M, 0.0 FTE)
The Program provides funding for petroleum and hazardous substance release prevention and detection activities including: compliance assistance, state program approvals, and technical equipment reviews and approvals. States could elect to maintain core program work with state resources rather than federal.

Endocrine Disruptors (Estimated FY 2020 Enacted: $7.5 M, 7.6 FTE)
The Program develops and validates scientific test methods for the routine, ongoing evaluation of pesticides and other chemicals to determine their potential interference with normal endocrine system function. The Program recently developed and validated some tier 1 and tier 2 testing approaches for endocrine disruption. The ongoing functions of the Program will be absorbed into the pesticides program using the currently available tiered testing.

Environmental Education (EE) (Estimated FY 2020 Enacted: $8.6 M, 9.2 FTE)
This program promotes delivery of environmental education through science-based methodologies that promote public engagement. In recognition of the significant guidance and financial support the EE program has provided to non-profit organizations, local education agencies, universities, community colleges, and state and local environmental agencies, funding for some of the environmental stewardship activities could be leveraged at the state or local level.

Geographic Program: Gulf of Mexico (Estimated FY 2020 Enacted: $17.6 M, 14.7 FTE)
The Program is a partnership of the five Gulf states, Gulf coastal communities, citizens, nongovernmental organizations, and federal agencies working together to initiate cooperative actions by public and private organizations to achieve specific environmental results. EPA will encourage the five Gulf of Mexico states to continue to make progress in restoring the Gulf of Mexico from within core water programs.

Geographic Program: Lake Champlain (Estimated FY 2020 Enacted: $13.4 M, 0.0 FTE)
The Program creates a pollution prevention, control, and restoration plan for protecting the Lake Champlain Basin. EPA will encourage New York and Vermont to continue to make progress in restoring Lake Champlain from within core water programs.

Geographic Program: Long Island Sound (Estimated FY 2020 Enacted: $21.0 M, 0.0 FTE)
The Program supports the implementation of the Comprehensive Conservation and Management Plan for the Long Island Sound National Estuary Program. EPA will encourage Long Island Sound states and local entities to continue to make progress in restoring the Sound from within core water programs.

Geographic Program: Other (Estimated FY 2020 Enacted: $9.6 M, 4.7 FTE)
The Program provides funding to develop and implement community-based approaches to mitigate diffuse sources of pollution and cumulative risk for geographic areas including: Lake Pontchartrain, Southern New England Estuary (SNEE), and the Northwest Forest Program. EPA will encourage states and local entities to continue to make progress in restoring these aquatic ecosystems from within core water programs.

Geographic Program: Puget Sound (Estimated FY 2020 Enacted: $33.0 M, 5.7 FTE)
The Program works to protect and restore the Puget Sound, focusing on environmental activities consistent with the State of Washington's 2020 Puget Sound Action Agenda. EPA will encourage state, tribal, and local entities to continue to make progress in restoring the Puget Sound from within core water programs.

Geographic Program: San Francisco Bay (Estimated FY 2020 Enacted: $5.9 M, 1.8 FTE)
The Program is aimed at protecting and restoring water quality and ecological health of the San Francisco Bay estuary through partnerships, interagency coordination, and project grants. EPA will encourage the state of California and local entities to continue to make progress in restoring the San Francisco Bay from within core water programs.

Gold King Mine Water Monitoring (Estimated FY 2020 Enacted: $4.0 M, 0.0 FTE)
This non-recurring program provided grants that supported the development and implementation of a program for monitoring of rivers contaminated by the Gold King Mine Spill. The Agency will continue coordinating with the involved states and tribes from within core water programs.

Indoor Air: Radon Program (Estimated FY 2020 Enacted: $3.3 M, 9.0 FTE)
Within this program, EPA studies the health effects of radon, assesses exposure levels, sets an action level, provides technical assistance, and advises the public of steps they can take to reduce exposure to radon. For over 30 years, EPA's radon program has provided important guidance and funding to help states establish their own programs.

Infrastructure Assistance: Mexico Border (Estimated FY 2020 Enacted: $25.0 M, 0.0 FTE)
The Program provides for the planning, design, and construction of water and wastewater treatment facilities along the U.S. Mexico border. The State Revolving Funds are a source of infrastructure funding that can continue to fund water system improvements in U.S. communities along the border.

LUST Prevention (Estimated FY 2020 Enacted: $25.4 M, 0.0 FTE)
The Program provides resources to states, tribes, territories, and intertribal consortia for their Underground Storage Tank (UST) programs, with a focus on inspections, enforcement, development of leak prevention regulations, and other program infrastructure. States could elect to maintain core program work with state resources rather than federal.

National Estuary Program / Coastal Waterways (Estimated FY 2020 Enacted: $29.8 M, 36.9 FTE)
The Program works to restore the physical, chemical, and biological integrity of estuaries and coastal watersheds. EPA will encourage states to continue this work and continue to implement conservation management plans.

Pollution Prevention Program (Estimated FY 2020 Enacted: $11.1 M, 49.2 FTE)
The program promotes environmentally sound business practices and the development of safer (green) chemicals, technologies, and processes. Partners can continue the best practices that have been shared through this program and continue efforts aimed at reducing pollution.

Reduce Risks from Indoor Air (Estimated FY 2020 Enacted: $11.8 M, 37.2 FTE)
This program addresses indoor environmental asthma triggers, such as secondhand smoke, dust mites, mold, cockroaches and other pests, household pets, and combustion byproducts through a variety of outreach, education, training and guidance activities.

Regional Science and Technology (Estimated FY 2020 Enacted: $808 K, 1.7 FTE)
The Program supplies laboratory analysis, field monitoring and sampling, and builds Tribal capacity for environmental monitoring and assessment. Central approach will be replaced with ad hoc efforts.

Safe Water for Small and Disadvantaged Communities (Estimated FY 2020 Enacted: $25.4 M, 1.0 FTE)
The Safe Water for Small and Disadvantaged Communities Program provides grants to eligible entities for use in carrying out projects and activities to assist public water systems in small and disadvantaged communities. EPA will continue to work on awarding the funds appropriated by Congress in FY 2018 and FY 2019. In FY 2021, EPA will continue to request the use of flexible subsidization funding authorities to target small and disadvantaged communities through the Drinking Water State Revolving Fund (SRF) mechanism.

Science Policy and Biotechnology (Estimated FY 2020 Enacted: $1.6 M, 4.6 FTE)
The Scientific Advisory Panel (SAP) organizes and conducts reviews (typically six to ten each year) by independent, outside scientific experts of science documents, science policies, and/or science programs that relate to EPA's pesticide and toxic program activities. Statutory requirements will be absorbed by the pesticides and toxics programs.

Stratospheric Ozone: Multilateral Fund (Estimated FY 2020 Enacted: $8.7 M, 0.0 FTE)
This program promotes international compliance with the Montreal Protocol by financing the incremental cost of converting existing industries in developing countries to cost-effective ozone friendly technology. EPA will continue domestic ozone-depleting substances reduction work.

Targeted Airshed Grants (Estimated FY 2020 Enacted: $56.3 M, 0.0 FTE)
This program offers competitive grants to reduce air pollution in the top five most polluted nonattainment areas relative to annual ozone or $PM_{2.5}$. This program is regional in nature and affected states can continue to fund work through EPA's core air grant programs and statutes.

Toxic Substances: Lead Risk Reduction Program (Estimated FY 2020 Enacted: $11.6 M, 62.9 FTE)
The program addresses exposure to lead from lead-based paint through regulations, certification, and training programs and public outreach efforts. Lead paint certifications will continue under the Chemical Risk Review and Reduction program and at the State level with support from EPA's Lead Categorical Grant, a partially restored program in FY 2021. Other forms of lead exposure are addressed through other targeted programs such as the State Revolving Funds to replace lead pipes.

Trade and Governance (Estimated FY 2020 Enacted: $5.4 M, 15.3 FTE)
This program promotes trade related activities focused on sustaining environmental protection. In FY 2021, EPA will focus its resources on core statutory work.

U.S. Mexico Border (Estimated FY 2020 Enacted: $2.7 M, 12.4 FTE)
The Program addresses environmental protection of the U.S Mexico border in partnership with the ten (10) Border States, U.S. Tribal government, and the Government of Mexico. In FY 2021, EPA will continue to engage both bilaterally and through multilateral institutions to improve international cooperation to prevent and address the transboundary movement of pollution. The State Revolving Funds also may continue to fund water system improvements in U.S. communities along the border.

Water Quality Research and Support Grants (Estimated FY 2020 Enacted: $23.7 M, 0.0 FTE)
The program focuses on 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. 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).

Eliminated Sub-Program/Projects

Atmospheric Protection Program (Estimated FY 2020 Enacted: $66.0 M)
The following voluntary climate-related partnership programs are proposed for elimination: AgSTAR, Center for Corporate Climate Leadership, Coalbed Methane Outreach Program, Combined Heat & Power Partnership, Global Methane Initiative, GreenChill Partnership, Green Power Partnership, Landfill Methane Outreach Program, Natural Gas STAR, Responsible Appliance Disposal Program, SF6 Reduction Partnership for Electric Power Systems, SmartWay, State and Local Climate Energy Program, and Voluntary Aluminum Industrial Partnership. (Note: The FY 2021 President's Budget includes a proposal to authorize the EPA to administer the ENERGY STAR program through the collection of user fees.)

Global Change Research (Research: AE) (Estimated FY 2020 Enacted: $19.3 M, 42.5 FTE)
The Program develops scientific information that supports policy makers, stakeholders, and society-at-large as they respond to climate change. This elimination prioritizes activities that support decision-making related to core environmental statutory requirements.

STAR Research Grants (Research: AE, CSS, SSWR, SHC) (Estimated FY 2020 Enacted: $28.6 M, 0.0 FTE)
The Science to Achieve Results, or STAR, funds research grants and graduate fellowships in environmental science and engineering disciplines through a competitive solicitation process and independent peer review. EPA will prioritize activities that support decision-making related to core environmental statutory requirements, as opposed to extramural activities.

WaterSense (Surface Water Protection) (Estimated FY 2020 Enacted: $4.5 M, 8.0 FTE)
WaterSense is a voluntary partnership program to label water-efficient products as a resource for helping to reduce water use.

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)
2019	020-99-99-99-99-0060-24	$1,000.0
2020	020-99-99-99-99-0060-24	$1,000.0
2021	020-99-99-99-99-0060-24	$1,064.0

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 will reduce costs and improve 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 2021. 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)
2019	020-99-99-99-99-3100-24	$225.0
2020	020-99-99-99-99-3100-24	$225.0
2021	020-99-99-99-99-3100-24	$225.0

USA Jobs

U.S. Office of Personnel Management (OPM) USA Jobs simplifies the process of locating and applying for federal jobs. USA Jobs is a standard job announcement and resume builder website. It is the one-stop for federal job seekers to search for and apply to positions on-line. This integrated process benefits citizens by providing a more efficient process to locate and apply for jobs and assists federal agencies in hiring top talent in a competitive marketplace. The OPM USA Jobs initiative has increased job seeker satisfaction with the federal job application process and is helping the Agency to locate highly-qualified candidates and improve response times to applicants.

The Agency is required to integrate with USA Jobs, to eliminate the need for applicants to maintain multiple user IDs to apply for federal jobs across agencies. The vacancy announcement format is improved for easier readability. The system can maintain up to five resumes per applicant, which allows them to create and store resumes tailored to specific skills. In addition, USA Jobs has a notification feature that keeps applicants updated on the status of the application and provides a link to the Agency's website for detailed information. This self-help USA Jobs feature allows applicants to obtain up-to-date information on the status of their application upon request.

Fiscal Year	Account Code	EPA Service Fee (in thousands)
2019	020-00-01-16-04-1218-24	$130.0
2020	020-00-01-16-04-1218-24	$130.0
2021[7]	020-00-01-16-04-1218-24	$0.0

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)
2019	020-00-01-01-04-1100-24	$96.0
2020	020-00-01-01-04-1100-24	$96.0
2021	020-00-01-01-04-1100-24	$96.0

[7] EPA will allocate the expected agency contribution for E-Gov and LoB initiatives as provided by OMB.

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 grants 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)
2019	020-00-04-00-04-0160-24	$276.0
2020	020-00-04-00-04-0160-24	$331.0
2021[8]	020-00-04-00-04-0160-24	$335.0

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 on-line training modules for budget activities – a valuable resource to all agency budget staff. The LoB has developed the capability to have secure, virtual on-line 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)
2019	020-99-99-99-99-3200-24	$110.0
2020	020-99-99-99-99-3200-24	$110.0
2021[9]	020-99-99-99-99-3200-24	$120.0

[8] EPA will allocate the expected agency contribution for E-Gov and LoB initiatives as provided by OMB.
[9] EPA will allocate the expected agency contribution for E-Gov and LoB initiatives as provided by OMB.

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 will 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)
2019	020-00-01-16-04-1200-24	$68.0
2020	020-00-01-16-04-1200-24	$69.0
2021	020-00-01-16-04-1200-24	$69.0

Integrated Acquisition Environment

The Integrated Acquisition Environment (IAE) is currently comprised of nine government-wide automated applications and/or databases that have contributed to streamlining the acquisition business process across the government. 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 continues to leverage these systems via electronic linkages between EPA's Acquisition System (EAS) and the IAE shared systems. 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 data provided by SAM to replace internally maintained vendor data. Contracting officers can download vendor-provided representation and certification information electronically via SAM as well, which allows vendors to submit this information once rather than separately for every contract proposal. Contracting officers are able to access the Excluded Parties List (EPLS) via SAM to identify vendors that are debarred from receiving contract awards.

Contracting officers also can link to the Wage Determination Online to obtain information required under the Service Contract Act and the Davis-Bacon Act. EAS links to the Federal Procurement Data System (FPDS) 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 submission of subcontracting data for contracts identified as requiring this information. EPA submits synopses of procurement opportunities over $25,000 to the Federal Business Opportunities website, where the information is accessible to the public. Vendors use this website to identify business opportunities in federal contracting.

Further, the Federal Funding Accountability and Transparency Act (FFATA) requires agencies to unambiguously identify contract, grant, and loan recipients and determine parent/child relationship

and address information. The FFATA taskforce determined that using both the Dun and Bradstreet DUNS Number (standard identifier for all business lines) and Central Contractor Registration (CCR, the single point of entry for data collection and dissemination) are the most appropriate ways to accomplish this. This fee will pay for EPA's use of this service while reporting grants and/or loans. Funds also may be used to consolidate disparate contract and grant systems into the new SAM.

Fiscal Year	Account Code	EPA Service Fee (in thousands)
2019	020-00-01-16-04-0230-24	$944.0
2020	020-00-01-16-04-0230-24	$720.0
2021	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)
2019	020-99-99-99-99-0090-24	$36.0
2020	020-99-99-99-99-0090-24	$41.0
2021[10]	020-99-99-99-99-0090-24	$46.0

Freedom of Information Act Portal

The Freedom of Information Act (FOIA) Improvement Act of 2016 directed the OMB and the Department of Justice (DOJ) 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 asked to contribute to this effort.

Fiscal Year	Account Code	EPA Contribution (in thousands)
2019	020-99-99-99-99-0090-24	$34.0
2020	020-99-99-99-99-0090-24	$43.0
2021	020-99-99-99-99-0090-24	$43.0

[10] EPA will allocate the expected agency contribution for E-Gov and LoB initiatives as provided by OMB.

FY 2021 Administrator's Priorities

Funding for the Administrator's priorities are allocated by program project in the FY 2021 President's Budget with a total of $2.375 million in the Environmental and Program 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 2021 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 and Energy	$50
S&T	Research: Chemical Safety and Sustainability	$50
Total		**$2,500**

Proposed FY 2021 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.

Establishment of Authority for Energy Star Fee Collection and Use

The FY 2021 Budget includes a proposal to authorize EPA to administer the ENERGY STAR program through the collection of user fees. Fee collections would begin after EPA undertakes a rulemaking process to determine which products would be covered by fees and the level of fees, and to ensure that a fee system would not discourage manufacturers from participating in the Program or result in a loss of environmental benefits. The fee collections would provide funding to cover an upfront appropriation, and continued expenses to develop, operate, and maintain the ENERGY STAR program. The legislative proposal to authorize collection and spending of the fees is as follows:

Section 131 of The Energy Policy and Conservation Act, as amended, 42 U.S.C. §6294A, is amended by inserting after paragraph (d):

"(e) ***User Fees***

(1) In General

In accordance with paragraph (a), the Administrator may prescribe by regulation, for application in fiscal year 2021 and in subsequent fiscal years, reasonable fees as the Administrator determines to be necessary to defray costs incurred for entities that participate in the ENERGY STAR program. The regulation will ensure that the fee imposed on each entity is sufficient and not more than reasonably necessary to cover a proportional share of ENERGY STAR program costs incurred in operating and maintaining the Energy Star program, including collection and processing fees. The Administrator shall amend this regulation periodically so as to ensure that the schedule of fees covers such program costs.

(2) Collection of Fees. *The Administrator shall prescribe procedures to collect the fees.*

(3) Availability of Fees.

(A) *Such fees shall be collected and available for ENERGY STAR program administration functions performed by the Agency in an amount and to the extent provided in advance in appropriations acts."*

FIFRA and PRIA 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 2021 Budget carries forward the proposed statutory language from the FY 2020 President's Budget to allow pesticide maintenance fees and registration service fees to be spent on additional

activities related to registration and reregistration of pesticides, such as processing and review of submitted data, laboratory support and audits, and rulemaking support.

Statutory language would ease spending restrictions related to both FIFRA pesticide maintenance fees and PRIA registration service fees. Since the FIFRA fees are mandatory, separate language has been prepared that will be transmitted at a later date. The proposal to allow EPA to collect and spend PRIA fees in FY 2021 and to authorize expanded use of PRIA fee collections is below. The addition of language specifying that PRIA fees collected in FY 2021 will remain available until expended would simplify aspects of budget execution.

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), to remain available until expended.

Notwithstanding section 33(d)(2) of the Federal Insecticide, Fungicide, and Rodenticide Act (& 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 2021.

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, supplemental distributor labels, transfers of registrations and data compensation rights, additional uses registered by states under section 24(c) of FIFRA, data compensation petitions, review of minor amendments, and notifications; laboratory support and audits; administrative support; 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 2021, EPA will operate the e-Manifest system and the Agency anticipates collecting and depositing approximately $26 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 2021 will remain available until expended would simplify aspects of budget execution.

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 2021, to remain available until expended.

Issuing Grants for $PM_{2.5}$ Monitoring Network under Clean Air Act Sections 103 and 105

Per the Consolidated Appropriations Act, 2019 (P.L. 116-6), EPA is directed to use Section 103 of the Clean Air Act to provide grants to states for the $PM_{2.5}$ monitoring network. Accordingly, EPA continues to issue grants to states for the network exclusively under Section 103. EPA requests the flexibility to use both Sections 103 and 105 authorities under the Clean Air Act to issue grants to states for the $PM_{2.5}$ monitoring network.

$151,961,000 shall be for grants, including associated program support costs, to states, 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 Sections 103 and 105 of the Clean Air Act for particulate matter monitoring and data collection activities subject to terms and conditions specified by the Administrator.

Current statutory language directs EPA to issue grants in support of the $PM_{2.5}$ monitoring under Section 103 of the Clean Air Act. However, given the maturity of the $PM_{2.5}$ monitoring network, it is appropriate for EPA to provide grants to states to fund the network under Section 105 of the Clean Air Act. The $PM_{2.5}$ monitoring network is a continuing activity in support of air quality management, which aligns with authorized activities under Section 105, whereas Section 103 is intended to fund research, demonstration, and other similar activities. The proposed language gives the Agency more flexibility to award grants under Section 103 and 105 authorities. The Clean Air Act Section 105 authority provides for cost-sharing between EPA and the states with up to 60 percent of costs provided by EPA.

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 Rule 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. Fee revenue of $2.75 million was collected in FY 2019, all from Section 5 fees for new chemicals reviews. 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. Language specifying that TSCA

fees collected in FY 2021 will remain available until expended would simplify aspects of budget execution.

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 2021, to remain available until expended.

Oil and Chemical Facility Compliance Assistance

The 2021 Budget requests authorization for the Administrator to collect and obligate fees to provide compliance assistance services for facilities who are required to prepare and submit Spill Prevention Control and Countermeasure Plans or Facility Response Plans under section 311(j) of the Federal Water Pollution Control Act and for facilities who are required to prepare and submit a Risk Management Plan under Section 112(r)(7) of the Clean Air Act. These fees are discretionary and would start in 2021 after the Agency establishes procedures for making and accepting a facility's request for voluntary assistance. The fees are offsetting collections and would provide for necessary expenses, including the development, operation, and maintenance of this voluntary compliance assistance service.

The legislative proposals to authorize collection and spending of the fees are as follows:

- *Oil Spill: Prevention, Preparedness, and Response*

The Administrator may collect fees to provide compliance assistance services for owners and operators of a non-transportation related onshore or offshore facility located landward of the coastline required to prepare and submit Spill Prevention Control and Countermeasure Plans or Facility Response Plans under section 311(j) of the Federal Water Pollution Control Act (33 U.S.C. 1321(j)): Provided, That fees collected for compliance assistance services pursuant to the authority provided in this paragraph by the Administrator shall be deposited in the Inland Oil Spill Programs account and shall remain available until expended for the expenses of providing compliance assistance services: Provided further, That the amount of such fees shall be based on the amount of compliance assistance services provided by the Agency: Provided further, That the owner or operator of a non-transportation related onshore or offshore facility located landward of the coastline required to prepare and submit a Spill Prevention Control and Countermeasure Plan or a Facility Response Plan under section 311(j) of the Federal Water Pollution Control Act (33 U.S.C. 1321(j))may request that the Administrator conduct an on-site walk-through of the facility to assist the owner or operator in complying with such section: Provided further, That the walk-through shall be conducted within one year of an accepted request: Provided further, That the Administrator may establish procedures for making and accepting such a request: Provided further, That observations, findings, conclusions, and recommendations made by the Administrator when conducting an on-site walk-through, including any report after an on-site walk-through, shall not in any private action or suit for damages or bodily injury, or in any action under section 505 of the Federal Water Pollution Control Act (33 U.S.C. 1365), be used or admitted as evidence: Provided further, That the Administrator may, by guidance, establish policies for the use of such evidence in actions under the Act.

- *State and Local Prevention and Preparedness*

The Administrator may collect fees to provide compliance assistance services for owners or operators of a stationary source required to prepare and submit a Risk Management Plan under section 112(r)(7) of the Clean Air Act (42 U.S.C. 7412(r)(7)): Provided, That fees collected for compliance assistance services pursuant to the authority provided in this paragraph by the Administrator in fiscal year 2021 shall be deposited in the Environmental Programs and Management account and shall remain available until September 30, 2022 for the expenses of providing compliance assistance services: Provided further, That the amount of such fees shall be based on the amount of compliance assistance services provided by the Agency: Provided further, That the owner or operator of a stationary source required to prepare and submit, or that has prepared and submitted, a Risk Management Plan under section 112(r)(7) of the Clean Air Act (42 U.S.C. 7412(r)(7)) may request that the Administrator conduct an on-site walk-through of the stationary source to assist the owner or operator in complying with such section: Provided further, That the walk-through shall be conducted within one year of an accepted request: Provided further, That the Administrator may establish procedures for making and accepting such a request: Provided further, That the observations, findings, conclusions, and recommendations made by the Administrator when conducting an on-site walk-through, including any report after an on-site walk-through, shall not in any private action or suit for damages or bodily injury, or in any action under section 304 of the Clean Air Act (42 U.S.C. 7604), be used or admitted as evidence: Provided further, That the Administrator may, by guidance, establish policies for the use of such evidence in actions under the Act.

Student Services Contracting Authority

In the FY 2021 Budget, 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 2021 Budget**:**

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.

Great Lakes Restoration Initiative

In the FY 2021 Budget, the Agency requests authorization to establish a minimum 10 percent cost-share requirement for all grant funding awarded by EPA utilizing Great Lakes Restoration Initiative funding except in cases of financial hardship.

Provided, That, EPA's share of the costs of financial assistance funded from the Great Lakes Restoration Initiative shall not exceed 90 percent: Provided further, That the Administrator may waive such cost share requirement in the cases of financial hardship.

Attorney Fee and Cost Payments

Making Litigation Costs Transparent – Equal Access for Justice Act (EAJA) FY 2019

Date of Final fee agreement or court disposition	Case Name	Court	Case Number	Judge	Case Disposition	Amount of Fees and/or Costs Paid	Source of Funds	Was amount negotiated or court ordered?	Recipients	Nature of Case	Hourly Rate of Attorney	Hourly rate of Expert Witness
9/18/2018[11]	A Community Voice, California Communities Against Toxics, Healthy Homes Collaborative, New Jersey Citizen Action, New York City Coalition To End Lead Poisoning, Sierra Club, Collectively	9th Circuit	16-72816	Schroeder, Smith, and Piersol	Court granted the petition for writ of mandamus; DOJ/EPA negotiated fee settlement	$110,000.00	EPA Appropriations	Negotiated	Earthjustice	Petitioners successfully sought an order from the court requiring EPA to promulgate a rule updating the dust-lead hazard standards and the definition of lead-based paint under the Toxic Substances Control Act	Various Petitioners requested rates from $300/hr to $500/hr.	None
10/16/2018	Pineros y Campesinos Unidos Del Noroeste, United Farm Workers, Farmworker Assoc. of FL vs. EPA	Northern District of California	17-cv-03434-JSW	Judge Jeffrey White (Laurel Beeler US Magistrate Judge)	Parties could not agree on fees; Magistrate recommended $205,144.93 in fees and costs; EPA Challenged Magistrate's recommendation; Court increased fees award to $236,363.47	$236,363.47	EPA Appropriations	Court Ordered	Earthjustice	Petitioners successfully challenged EPA's decision to delay the effective date of the Certification of Pesticide Applicators Rule, as inconsistent with APA notice and comment requirements.	Court awarded the requested rates ranging from $350/hr to $750/hr.	None

[11] This Final fee agreement or court disposition was not included with the EPA's FY 2018 submission which was provided in EPA's FY 2020 Congressional Justification and titled *Attorney Fee and Cost Payments Obligated to FY 2018 Under Equal Access to Justice Act*.

Physicians' Comparability Allowance (PCA) Plan

Department and component:

Environmental Protection Agency

Purpose: 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.

	Category of Physician Position	**Covered by Agency** (mark "x" if covered)	**Basis for Category**
Number of Physicians Receiving PCAs by Category (non-add)	Category I Clinical Position		
	Category II Research Position	X	The small population of EPA Research Physicians 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 research physicians would seek employment at federal agencies that provide the allowance.
	Category III Occupational Health		
	Category IV-A Disability Evaluation		
	Category IV-B Health and Medical Admin.		

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 5 CFR 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.

	Category of Physician Position	**Recruitment and retention problem**
Number of Physicians Receiving PCAs by Category (non-add)	Category I Clinical Position	
	Category II Research Position	The small population of EPA Research Physicians 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 research physicians would seek employment at federal agencies that provide the allowance.
	Category III Occupational Health	
	Category IV-A Disability Evaluation	
	Category IV-B Health and Medical Admin.	

3) Explain how the Agency determines the amounts to be used for each category of physicians.

	Category of Physician Position	**Basis of comparability allowance amount**
Number of Physicians Receiving PCAs by Category (non-add)	Category I Clinical Position	
	Category II Research 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 III Occupational Health	
	Category IV-A Disability Evaluation	
	Category IV-B Health and Medical Admin.	

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.

One physician retired in early FY 2019; EPA plans to use the PCA to recruit and retain a qualified candidate to fill this vacancy.

3-4) Please complete the table below with details of the PCA agreement for the following years:

	PY 2019 (Actual)	**CY 2020 (Estimates)**	**BY* 2021 (Estimates)**
3a) Number of Physicians Receiving PCAs	2	3	3
3b) Number of Physicians with One-Year PCA Agreements			
3c) Number of Physicians with Multi-Year PCA Agreements	2	3	3
4a) Average Annual PCA Physician Pay (without PCA payment)	$171,000	$176,300	$178,000
4b) Average Annual PCA Payment	$29,900	$29,900	$29,900

*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, requiring EPA to refill vacant positions. Turn-over statistics should be viewed in this light.

IT Resources Statement

IT Resource Statements
Environmental Protection Agency
IT Resource Statements for FY 2021 CJ Budget Submission

OMB Guidance	EPA Statement	Signature/Date
A statement that the CIO collaborated with all component CIOs, the Senior Agency Official for Privacy (SAOP), and the Chief Financial Officer (CFO) on the IT Budget submissions, and that IT includes appropriate estimates of all IT resources included in the budget request/President's Budget.	The CIO collaborates regularly with Senior IT Leaders on IT service and resource priorities. For the FY21 CJ Submission planning cycle, the OCIO reviewed all investments in the Agency IT Portfolio Summary (AITPS) with the Office of the Chief Financial Officer (OCFO) and provided feedback to all Program offices' regarding their Major IT Investments. The CIO also conducted IT portfolio reviews, with OCFO participation, that covered all CPIC investments and their projected FY21 CJ Submission figures. The FY21 CPIC major estimates in this budget submission are consistent with data presented in the IT Portfolio Reviews.	1/29/2020 David Bloom Date Acting Chief Financial Officer 1/29/2020 Vaughn Noga Date Chief Information Officer Senior Agency Official for Privacy
A statement from the CIO indicating the extent to which the CIO has reviewed and had significant input in approving IT Investments included in this budget request. For example, if the CIO has reviewed and approved all the Investments from Bureau/Component/Operating Division/Mode A, B, and C, but not D, then the statement must identify that the CIO reviewed and approved Investments from Bureau/Component/Operating Division/Mode A, B, and C.	The CIO has significant input in approving IT investments operated by the Office of Mission Support (OMS). As noted above, the CIO also reviewed all CPIC investments annually as part of the OMB Submission process. Additionally, the CIO annually reviews the toplines budget numbers for the Agency's IT Investment Portfolio with a focus on toplines by RPIOs, by CPIC Investment Category level, by Part 1, 2, and 3 of IT Portfolio, by appropriation, by IT spend type, by IT Tower, and by program. CIO also reviews all new, consolidated, eliminated and retired investments.	1/29/2020 Vaughn Noga Date Chief Information Officer

OMB Guidance	EPA Statement	Signature/Date
A joint statement from the CFO and CIO identifying the extent to which the CIO had a significant role in reviewing planned IT support for major programs and significant increases and decreases in IT resources reflected in this budget.	The OCIO and OCFO meet regularly to discuss top issues in IT funding. The OCFO met with the OCIO prior to the FY21 CJ Submission to review the IT budget submission for planned IT resources for major programs and significant increases and decreases in the overall IT budget.	1/29/2020 David Bloom Date Acting Chief Financial Officer 1/29/2020 Vaughn Noga Date Chief Information Officer
An update of the CIO's common baseline rating for Element D (CIO reviews and approves major IT portion of budget request) to show whether the desired outcome is: a. Incomplete – Agency has not started development of a plan describing changes it will make to ensure that all baseline FITARA responsibilities are in place. b. Partially addressed – Agency is working to develop a plan describing the changes it will make to ensure that all baseline FITARA responsibilities are in place.	Fully implemented – EPA has developed and implemented its plan to ensure that for Common Baseline Element D ("CIO reviews and approves major IT investment portion of budget request"), all FITARA responsibilities are in place.	1/29/2020 Vaughn Noga Date Chief Information Officer

OMB Guidance	EPA Statement	Signature/Date
c. Fully implemented – Agency has developed and implemented its plan to ensure that all common baseline FITARA responsibilities are in place.		
The extent to which the CIO can certify the use of incremental development. For example, if the CIO can certify that all the Investments from bureau/component/Operating Division/Mode A, B, and C, but not D, are using incremental development practices then the statement must identify that the CIO certifies that Investments from bureaus/components/Operating Divisions/Modes A, B, and C are using incremental development practices.	EPA has one major investment that has been CIO-certified as employing incremental development, and the five additional major investments have self-certified as employing incremental development. EPA will create and document a CIO certification process for the use of incremental development. During FITARA acquisition reviews and IT Portfolio Reviews OMS has identified several systems that use mature Agile development practices. EPA activities to promote Agile practices include an IT Fellowship program and standing up a Developer's Guild.	V—2 ~~2 1/29/2020 Vaughn Noga Date Chief Information Officer

OMB Guidance	EPA Statement	Signature/Date
A statement that the SAOP has reviewed the IT Budget submission and that privacy requirements, as well as any associated costs, are explicitly identified and included with respect to any IT resources that will be used to create, collect, use, process, store, maintain, disseminate, disclose, or dispose of personally identifiable information (PII).	The CIO collaborates regularly with Senior IT Leaders on IT service and resource priorities. For the FY21 CJ Submission planning cycle, the OCIO reviewed all investments in the Agency IT Portfolio Summary (AITPS) and provided feedback to all Program offices' regarding their Major IT Investments. The CIO also conducted IT portfolio reviews, that covered all CPIC investments and their projected FY21 CJ Submission figures. The FY21 CPIC major estimates in this budget submission are consistent with data presented in the IT Portfolio Reviews.	1/29/2020 Vaughn Noga Date Chief Information Officer Senior Agency Official for Privacy
A statement explaining any planned deviation, if applicable, from the requirements specified in M-19-16 regarding agency solicitation of new or modernized technology or services for which a Quality Service Management Office (QSMO) has been pre-designated.	EPA is delaying its migration to a grants management shared service solution until there is an identified grants management QSMO solution that meets EPA's core business needs while remaining cost-effective.	1/29/2020 Vaughn Noga Date Chief Information Officer

Notes:

IG's Comments on the FY 2021 President's Budget

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
INSPECTOR GENERAL

JAN 10 2020

The Honorable Mick Mulvaney
Director
Office of Management and Budget
Executive Office of the President
725 17th Street, NW
Washington, D.C. 20503

Dear Mr. Mulvaney:

Pursuant to Section 6(g)(3)(E) of the Inspector General Act of 1978, as amended, I am submitting comments concerning the President's proposed fiscal year (FY) 2021 budget for the U.S. Environmental Protection Agency's (EPA's) Office of Inspector General (OIG). Section 6(g)(3)(E) of the Inspector General Act of 1978 provides that:

> The President shall include in each budget of the United States Government submitted to Congress—
>
> (E) any comments of the affected Inspector General with respect to the proposal if the Inspector General concludes that the budget submitted by the President would substantially inhibit the Inspector General from performing the duties of the office.

The proposed FY 2021 budget, which reduces the OIG's budget by over $3 million from the FY 2020 enacted appropriations, can create a significant challenge for the EPA OIG and our ability to accomplish our mission of oversight for the EPA and the Chemical Safety and Hazard Investigation Board (CSB). A budget at this level would destabilize the OIG and have an immediate negative impact on the OIG's production capacity and ability to respond to ever-demanding and increased workload requirements. As such, I do not agree with the President's budget request, and argue that such a proposal would substantially inhibit the OIG from performing the duties of the office, including mandatory responsibilities explicitly required by federal law.

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. The OIG's primary deliverables are independent audits, evaluations, and criminal and employee misconduct investigations. These activities are labor intensive. Many audits are mandated by Congress, and as the OIG attempts to continue to balance its workload with a tight annual budget of $53 million, a budget of $49.6 million would virtually eliminate our ability to perform many discretionary audits and evaluations.

The OIG's work adds value and enhances public trust and safety by keeping the heads of the EPA and the CSB, along with Congress, fully and immediately informed of problems and deficiencies. Our work also keeps agency heads informed of the necessity for and progress of corrective actions, helps to hold

the agencies accountable, and provides valuable management tools that represent a substantial source of the OIG's ability to produce a positive return on investment to taxpayers. Further, the OIG's mandatory audits and investigations are not performed by any other entity within the EPA or the CSB. As a result, responses that are not timely due to limited resources create an unacceptable risk to the agencies the OIG oversees and the taxpayers' investment in them.

The OIG consistently provides a significant positive return on investment to the public by recommending improvements in the delivery of the EPA's and the CSB's respective missions such as reduction in operation and environmental risks, costs savings and recoveries, and improvements in program efficiencies and integrity. While the OIG receives multiple and varied inquires to review the EPA's and the CSB's actions or inaction, in recent years, such requests have exceeded the OIG's ability to handle them all, due to a significant lack of resources. The OIG has had to inform congressional and other requestors that we cannot undertake a requested review, can only do a portion of the requested work, or will try to do it at a later time. These requests include projects that we believe would have significant value, but we must forego due to our significant lack of resources resulting in a diminished capacity to adequately respond.

I urgently and respectfully request that the President's budget recognize the work the OIG has done in reshaping the workforce, and the greater vulnerability to our agencies that any reduction of OIG funding would create, along with the loss of return on investment. I also request that the OIG's budget request of $59.3 million be recognized. If not, as provided by the Inspector General Act, I request that these comments be included in transmitting the President's Budget to Congress.

If you or your staff have any questions, or would like to meet to discuss this matter, you may reach me at (202) 566-0394 or at Sheehan.Charles@epa.gov.

Sincerely,

Charles J. Sheehan

Charles Sheehan
Acting Inspector General

cc: Michael Horowitz, Chair, Council of the Inspectors General on Integrity and Efficiency
Matthew Z. Leopold, General Counsel, EPA
David Bloom, Acting Chief Financial Officer, EPA

EPA Budget by National Program Manager and Major Office

FY 2021 President's Budget					
NPM	**Major Office**	**Pay ($K)**	**Non-Pay ($K)**	**Total ($K)**	**FTE**
OA	Immediate Office	$3,924	$536	$4,460	22.1
	Office of Congressional and Intergovernmental Relations	$7,094	$206	$7,301	40.3
	Office of Public Affairs	$5,369	$147	$5,516	30.5
	Office of Public Engagement	$2,112	$53	$2,165	12.0
	Office of Policy	$27,402	$8,285	$35,688	137.2
	Children's Health Protection	$1,498	$50,608	$52,106	7.9
	Office of Civil Rights	$3,488	$346	$3,835	18.5
	Executive Secretariat	$1,936	$42	$1,978	11.0
	Executive Services	$2,623	$161	$2,784	14.9
	Homeland Security	$2,024	$305	$2,329	9.3
	Science Advisory Board	$3,853	$104	$3,957	18.7
	Small and Disadvantaged Business Utilization	$1,434	$771	$2,204	10.0
	Regional Resources	$39,324	$3,106	$42,431	222.3
	OA TOTAL	**$102,081**	**$64,672**	**$166,753**	**554.7**
OAR	Immediate Office	$7,952	$6,117	$14,069	47.7
	Office of Air Quality Planning and Standards	$40,826	$8,655	$49,481	240.7
	Office of Atmospheric Programs	$21,569	$12,488	$34,057	117.4
	Office of Transportation and Air Quality	$52,033	$25,843	$77,876	296.7
	Office of Radiation and Indoor Air	$12,285	$5,553	$17,838	72.0
	Regional Resources	$72,168	$175,342	$247,510	429.0
	OAR TOTAL	**$206,834**	**$233,998**	**$440,832**	**1,203.5**
OCFO	Immediate Office	$1,999	$2,723	$4,723	12.0
	Office of Budget	$6,330	$2,003	$8,334	38.0
	Office of Planning, Analysis and Accountability	$3,665	$347	$4,012	22.0
	Office of Technology Solutions	$7,680	$27,350	$35,030	46.1
	Office of Resource and Information Management	$22,224	$835	$23,059	11.0
	Office of the Controller	$1,832	$2,928	$4,760	131.4

NPM	Major Office	Pay ($K)	Non-Pay ($K)	Total ($K)	FTE
OCFO	OCFO eEnterprise	$667	$329	$996	4.0
	Regional Resources	$33,254	$1,190	$34,444	196.0
	OCFO Total	**$77,652**	**$37,705**	**$115,357**	**460.5**
OCSPP	Immediate Office	$5,864	$1,963	$7,827	32.7
	Office of Pesticide Programs	$73,694	$3,640	$77,335	410.9
	Office of Pollution Prevention and Toxics	$49,751	$21,272	$71,023	273.4
	Office of Science Coordination and Policy	$883	$13	$896	4.9
	Regional Resources	$13,339	$17,075	$30,413	75.6
	OCSPP TOTAL	**$143,531**	**$43,963**	**$187,494**	**797.5**
OECA	Immediate Office	$7,368	$1,364	$8,732	39.9
	Office of Civil Enforcement	$17,635	$4,373	$22,009	98.8
	Office of Criminal Enforcement, Forensics, and Training	$53,424	$10,701	$64,126	257.1
	Office of Compliance	$18,013	$28,680	$46,694	104.4
	Federal Facilities Enforcement Office	$2,321	$398	$2,718	12.7
	Office of Site Remediation Enforcement	$11,619	$25,735	$37,354	65.4
	Regional Resources	$296,313	$13,785	$310,098	1,670.3
	OECA Total	**$406,694**	**$85,037**	**$491,731**	**2,248.6**
OGC	Immediate Office	$2,384	$130	$2,514	11.8
	Air and Radiation Law Office	$6,869	$75	$6,944	33.8
	Pesticides and Toxic Substances Law Office	$3,595	$50	$3,645	19.7
	Solid Waste and Emergency Response Law Office	$2,346	$60	$2,406	11.5
	Water Law Office	$3,535	$80	$3,615	17.4
	Civil Rights - Title VI	$1,692	$50	$1,742	23.6
	Other Legal Support	$16,694	$5,469	$22,163	66.3
	Regional Resources	$27,837	$991	$28,828	137.4
	OGC TOTAL	**$64,952**	**$6,905**	**$71,857**	**321.5**

FY 2021 President's Budget					
NPM	**Major Office**	**Pay ($K)**	**Non-Pay ($K)**	**Total ($K)**	**FTE**
OIG	Immediate Office	$530	$17	$547	3.3
	Office of Audit	$24,119	$609	$24,728	136.9
	Office of Congressional, Public Affairs and Management	$2,956	$69	$3,026	16.7
	Office of Chief of Staff	$6,172	$3,955	$10,127	35.9
	Office of Investigations	$10,640	$505	$11,145	49.2
	OIG TOTAL	**$44,417**	**$5,155**	**$49,572**	**242.0**
OITA	Immediate Office	$430	$52	$481	2.0
	Office of Regional and Bilateral Affairs	$1,329	$3,167	$4,496	8.0
	Office of Global Affairs and Policy	$1,433	$2,905	$4,338	8.5
	Office of Management and International Services	$797	$884	$1,681	4.0
	American Indian Environmental Office	$2,716	$940	$3,655	14.3
	Regional Resources	$9,706	$44,591	$54,297	55.9
	OITA TOTAL	**$16,411**	**$52,538**	**$68,949**	**92.7**
OLEM	Immediate Office	$5,344	$5,001	$10,345	30.4
	Federal Facilities Restoration and Reuse Office	$2,362	$626	$2,988	13.2
	Office of Communication, Partnership, and Analysis	$1,940	$1,213	$3,154	11.1
	Office of Superfund Remediation and Technology Innovation	$25,060	$70,224	$95,284	146.3
	Office of Resource Conservation and Recovery	$20,755	$11,696	$32,452	115.5
	Office of Underground Storage Tanks	$2,870	$761	$3,631	16.3
	Office of Brownfields and Land Revitalization	$2,116	$11,211	$13,327	12.1
	Office of Emergency Management	$10,495	$26,196	$36,691	59.6
	Regional Resources	$256,312	$595,190	$851,502	1,477.5
	OLEM TOTAL	**$327,253**	**$722,120**	**$1,049,373**	**1,882.0**

FY 2021 President's Budget					
NPM	**Major Office**	**Pay ($K)**	**Non-Pay ($K)**	**Total ($K)**	**FTE**
OMS	Immediate Office	$14,294	$22,505	$36,800	81.6
	Environmental Appeals Board	$2,400	$27	$2,427	11.3
	Administrative Law Judges	$2,657	$35	$2,692	12.5
	Office of Administration	$18,835	$341,137	$359,972	85.6
	Office of Human Resources	$19,157	$7,519	$26,675	88.6
	OARM - Research Triangle Park	$13,128	$34,409	$47,537	78.9
	Office of Grants and Debarment	$8,994	$4,684	$13,678	53.5
	OARM - Cincinnati	$11,603	$15,670	$27,273	70.5
	Office of Acquisition Solutions	$30,162	$9,168	$39,330	181.9
	Office of Enterprise Information Programs	$6,153	$9,593	$15,746	33.4
	Office of Information Management	$10,883	$22,284	$33,167	57.5
	Office of Digital Services & Technical Architecture	$3,984	$1,707	$5,691	22.1
	Office of Customer Advocacy, Policy & Portfolio Management	$5,499	$2,146	$7,645	30.5
	Office of Information Security & Privacy	$2,680	$17,039	$19,719	13.9
	Office of Information Technology Operations	$1,823	$2,483	$4,307	10.0
	Regional Resources	$80,583	$53,373	$133,956	431.4
	OMS TOTAL	**$232,833**	**$543,781**	**$776,614**	**1,263.2**
RD	ORD Headquarters	$39,326	$19,946	$59,272	208.2
	Center for Computational Toxicology & Exposure	$21,714	$23,061	$44,775	132.5
	Center for Environmental Measurements & Modeling	$44,793	$21,189	$65,982	251.5
	Center for Public Health & Environmental Assessment	$54,077	$18,919	$72,996	304.8
	Center for Environmental Solutions & Emergency	$39,024	$20,119	$59,143	218.5
	Regional Resources*	$33,163	$12,039	$45,202	192.1
	ORD TOTAL	**$232,097**	**$115,273**	**$347,370**	**1,307.6**

FY 2021 President's Budget					
NPM	**Major Office**	**Pay ($K)**	**Non-Pay ($K)**	**Total ($K)**	**FTE**
OW	Immediate Office	$10,294	$3,698	$13,992	60.0
	Office of Ground Water and Drinking Water	$29,213	$74,897	$104,111	167.7
	Office of Science and Technology	$18,124	$11,542	$29,665	105.4
	Office of Wastewater Management	$21,500	$101,740	$123,240	123.7
	Office of Wetlands, Oceans and Watersheds	$14,159	$40,069	$54,228	83.1
	Regional Resources	$184,362	$2,541,627	$2,725,990	1,077.9
	OW TOTAL	**$277,652**	**$2,773,574**	**$3,051,226**	**1,617.8**
Subtotal Agency Resources		**$2,132,407**	**$4,684,721**	**$6,817,128**	**$11,992**
	Less Rescission of Prior Year Funds			($159,057)	
	Reimbursable FTE				618.6
Total Agency Resources		**$2,132,407**	**$4,684,721**	**$6,658,071**	**12,610.2**

* To enhance collaboration and coordination of research across EPA, starting in FY 2020 the Office of Research and Development is the National Program Manager of regional laboratories. Resources did not cross appropriations or program projects to support this change in the management of EPA regional labs.

FY 2021: Consolidations, Realignments, or Other Transfer or Resources

There are no consolidations, realignments, or other transfers of resources from one program project to another associated with the FY 2021 budget submission. The Agency continues to consider enhancements and administrative efficiencies. Areas for potential future consideration are outlined below.

Office of the Chief Financial Officer

In implementation of the requirements of the *Foundations for Evidence Based Policy Act (P.L. 115-435)*, the Agency is working to establish a new Central Evaluation Office in the Office of Chief Financial Officer and has requested targeted resources in FY 2021 to support the Central Evaluation Office. As part of this work, EPA may consider a minor internal reorganization to streamline operations to better support its EPA customers.

Office of Chemical Safety and Pollution Prevention

As part of EPA's long-term commitment to ensure the effective advancement of the chemicals safety program to protect human health and the environment from potential risks of pesticides and toxic chemicals, the Agency's Office of Chemical Safety and Pollution Prevention will establish a presence in Research Triangle Park (RTP), North Carolina. Positions in RTP will be filled competitively and will not involve reassignments or involuntary moves, and the effort will utilize existing EPA space and resources. Establishing a presence in RTP is expected to improve recruitment of scientific staff and increase capacity to meet OCSPP's statutory and regulatory milestones under TSCA, FIFRA, FQPA, ESA, and associated statutes.

Office of Mission Support

The Office of Mission Support (OMS) was created on November 26, 2018 through a reorganization that combined the functions of the Offices of Administration and Resources Management and the Office of Environmental Information. In the year since the reorganization, EPA has identified potential opportunities to further streamline operations. As the Agency evaluates these options, OMS may consider a second internal reorganization to better support its EPA customers.

S. 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 2021 budget justification, EPA has developed a report listing each open, closed, or unimplemented public recommendation for corrective action from the Office of the Inspector General along with the implementation status of each recommendation.

EPA is also working to develop a report listing each open, closed, or unimplemented public recommendation of the Government Accountability Office (GAO) and the implementation status of each GAO recommendation, however the Agency requires additional time to complete this report. EPA will publish an addendum to this Congressional Justification when the report on GAO's recommendations is finalized.

The Agency's GAO-IG Act Report will be available at the following link:

https://www.epa.gov/cj

EPA OIG Open Recommendations and Corrective Actions

FY Audit Number	Recommendations and Corrective Actions	Report Date
17-P00378-001	Recommendation 1: We recommend that the Deputy Administrator: 5. Examine all of the EPA's web-based risk screening and mapping tools to ensure the need for each tool and to avoid potential overlap, duplication and waste.	2017-09-07
	Corrective Action 1-1: *Planned:* 2019-12-31 *Completed:* 0000-00-00 On July 3, 2017, then acting Deputy Administrator, Mike Flynn issued a memorandum agreeing with the OIG and asked OEI and the Chief Information Officer to review their existing policies and procedures to ensure that sufficient mechanisms are in place to identify potential overlap or duplication during the development or modification of any web-based risk screening and mapping tools. We have requested an update from OMS on this matter. *Status:* Delayed	
18-P00240-001	Recommendation 1: Establish a strategic vision and objectives for 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	2018-09-05
	Corrective Action 1-1: *Planned:* 2020-12-31 *Completed:* 0000-00-00 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. Status: Adhering	
	Recommendation 2: 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 2-1: *Planned:* 2020-12-31 *Completed:* 0000-00-00 The agency concurs with this recommendation and will complete an assessment and action plan to identify and address data management requirements for citizen science. *Status:* Adhering	
19-P00267-001	Recommendation 1: Amend guidance for the Regulatory Reform Task Force to specify: a) the frequency of meetings.	2019-08-09
	Corrective Action 1-1: *Planned:* 2020-03-31 *Completed:* 0000-00-00 The Chair of the Regulatory Reform Task Force will send a message to the members of the TF that addresses the issues identified in these recommendations. *Status:* Adhering	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	Recommendation 2: Amend guidance for the Regulatory Reform Task Force to specify: b) the public dissemination of progress reports and regulatory and deregulatory recommendations.	
	Corrective Action 2-1: *Planned:* 2020-03-31 *Completed:* 0000-00-00 The Chair of the Regulatory Reform Task Force will send a message to the members of the Task Force that addresses the issues identified in these recommendations. Status: Adhering	
	Recommendation 3: Amend guidance for the Regulatory Reform Task Force to specify: c) the frequency and means of stakeholder outreach.	
	Corrective Action 3-1: *Planned:* 2020-03-31 *Completed:* 0000-00-00 The Chair of the Regulatory Task Force will send a message to the members of the TF that addresses the issues identified in these recommendations. Status: Adhering	
	Recommendation 4: Establish or identify an accessible portal that can provide up-to-date information on both the EPA's deregulatory and regulatory actions taken under Executive Order 13771.	
	Corrective Action 4-1: *Planned:* 2020-03-31 *Completed:* 0000-00-00 In addition to maintaining existing sources of information on EO 13771 regulatory actions, EPA will establish a new web page that will list the final regulatory actions as they are completed. EPA will establish the web page by Q2 FY20. Status: Adhering	
	Recommendation 5: Amend guidance for the Regulatory Reform Task Force to specify: a) the frequency of meetings.	
	Corrective Action 5-1: *Planned:* 2020-03-31 *Completed:* 0000-00-00 The Chair of Regulatory Reform Task Force will send a message to the members of the Task Force that addresses the issues identified in these recommendations. Status: Adhering	
19-F00003-007	Recommendation 1: Implement controls to enforce the required verification of individuals' identity every time individuals enter the computer rooms.	2018-11-14
	Corrective Action 1-1: *Planned:* 2020-03-31 *Completed:* 0000-00-00 Updates to badge readers are anticipated in the future, though a specific timeframe has not been established. OMS will review this requirement as it relates to the new badge readers. In the interim, the computer room referenced in this report is not a standalone facility, it is a controlled room within a controlled building. Physical security is multi-layered for access to the campus, starting with the exterior, then within buildings, then within rooms. The individual's identity is verified physically by visual inspection of a federal ID at RTP Campus gates; by PIV swipe and guard verification that the face matches the picture that shows up on their monitor; by PIV access to elevator to computer room floor; and finally, by PIV at computer room entrance. This is an accepted physical security practice in accordance with Federal standards. Status: Adhering	

FY Audit Number	Recommendations and Corrective Actions	Report Date
16-F00040-130	Recommendation 1: Implement an internal control process for transferring the management of an application's user access to the Application Management Staff.	2015-11-16
	Corrective Action 1-1: *Planned:* 2017-12-31 *Completed:* 0000-00-00 Upon availability of resources and completion of other high priority IT projects (i.e., CVE and Account Code Structure Project), OCFO will transfer the management of all application user access processes to the Office of Technology Solutions, Application Management Staff. Status: Delayed	
	Recommendation 2: Conduct an inventory of OCFO systems managed by the Application Management Staff and create or update supporting access management documentation for each application.	
	Corrective Action 2-1: *Planned:* 2017-12-31 *Completed:* 0000-00-00 Upon availability of resources and completion of other high priority IT projects (i.e., CVE and ACS), OCFO will conduct an inventory of OCFO systems managed by OTS/AMS and create or update supporting access management documentation for each application. Status: Delayed	
17-F00046-130	Recommendation 1: Work with the Compass Financials service provider to establish controls for creating and locking administrative accounts.	2016-11-15
	Corrective Action 1-1: *Planned:* 2021-09-30 *Completed:* 0000-00-00 The agency will work with the service provider to analyze alternatives for controls and establish an action plan. Status: Adhering	
	Recommendation 2: Work with the Compass Financials service provider to develop and implement a methodology to monitor accounts with administrative capabilities.	
	Corrective Action 2-1: *Planned:* 2021-09-30 *Completed:* 0000-00-00 The agency will work with the service provider to analyze alternative methodologies and establish an action plan. *Status:* Adhering	
16-P00275-140	Recommendation 1: 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.	2016-08-18
	Corrective Action 1-1: *Planned:* 2024-09-30 *Completed:* 0000-00-00 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 in light of the anti-backsliding study. That study, discussed in Corrective Action 2, would need to be completed prior to any such determination taking place. Status: Adhering	
	Recommendation 2: 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.	
	Corrective Action 2-1: *Planned:* 2024-09-30 *Completed:* 0000-00-00	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	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 a number of 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. Status: Adhering	
17-P00249-140	Recommendation 1: Revise the benzene regulations to require that attest engagements verify annual average benzene concentrations and volumes with batch reports, to ensure that credits needed or generated are correct.	2017-06-08
	Corrective Action 1-1: *Planned:* 2020-09-30 *Completed:* 0000-00-00 OAR agrees that this recommendation could further enhance our oversight of the gasoline benzene program but addressing this recommendation requires a change to our compliance regulations, which necessitates the promulgation of a rule. OAR agrees to propose specifications to address this recommendation in the next appropriate proposed fuels rule. However, OAR notes that all rules follow an established rule making process so the content of final rules cannot be pre-determined. Status: Adhering	
	Recommendation 2: Revise the annual benzene report so that facilities must report the number of benzene deficits or credits at the end of the current reporting year.	
	Corrective Action 2-1: *Planned:* 2020-09-30 *Completed:* 0000-00-00 OAR agrees that this recommendation could further enhance our oversight of the gasoline benzene program but addressing this recommendation requires a change to our compliance regulations, which necessitates the promulgation of a rule. OAR agrees to propose specifications to address this recommendation in the next appropriate proposed fuels rule. However, OAR notes that all rules follow an established rule making process so the content of final rules cannot be pre-determined. Status: Adhering	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	Recommendation 3: Improve controls over the reporting system to assure facility-submitted data are of the quality needed to assess compliance with the regulations. These controls should provide reasonable assurance that the following occurs: a. Volumes and average benzene concentrations in facilities' annual benzene reports match those calculated based on their batch reports. b. Benzene concentrations in facility batch reports and annual benzene reports contain two decimal places. c. Production dates match the compliance year in facility reports. d. Facilities use only valid product codes in their reports. e. Only valid company and facility identification numbers are used. f. Maximum average benzene concentrations for the second compliance period and beyond match the corresponding annual average benzene concentrations. g. Import companies aggregate their facilities and submit just one annual benzene report. h. All required reports are submitted.	
	Corrective Action 3-1: *Planned:* 2020-06-30 *Completed:* 0000-00-00 OAR agrees that this recommendation would further enhance our oversight of the gasoline benzene program. Addressing this recommendation through an IT solution, however, would require substantial new investment in our IT systems and neither the President's Budget Request for FY 2018 nor FY 2019 provided for an investment of the size necessary to implement the OIG□s recommended IT improvements. OAR continues to expect limited discretionary funds for IT projects going forward and is therefore focusing on effectively operating and maintaining existing registration and compliance data systems for the fuels programs. In lieu of IT investments for the current gasoline benzene program, the Agency commits to issuing a guidance document and conducting a webinar to educate stakeholders not only on compliance requirements of the current program but also potential changes under discussion as part of the Agency's forthcoming fuels regulation streamlining rulemaking which is expected to be proposed in 2020 (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=2018 10&RIN=2060-AT31). The guidance and webinar are expected to cover the following subjects: □ Gasoline benzene program requirements □ what the requirements are and who is subject to them; □ Averaging, Banking, and Trading Program; □ Sampling, Tesing, and Retention requirements; □ Recordkeeping and reporting requirements, including information on how to use EPA's reporting forms and fuel compliance information systems; □ Attest engagements; and	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	□ Violations and penalties. Status: Adhering	
	Recommendation 4: Ensure the integrity of benzene credit trading by developing and implementing a process to verify that annual average benzene concentration and total volume values that facilities input into the trading database are supported by batch reports.	
	Corrective Action 4-1: *Planned:* 2020-06-30 *Completed:* 0000-00-00 OAR agrees that this recommendation would further enhance our oversight of the gasoline benzene program. Addressing this recommendation through an IT solution, however, would require substantial new investment in our IT systems and neither the President's Budget Request for FY 2018 nor FY 2019 provided for an investment of the size necessary to implement the OIG□s recommended IT improvements. OAR continues to expect limited discretionary funds for IT projects going forward and is therefore focusing on effectively operating and maintaining existing registration and compliance data systems for the fuels programs. In lieu of IT investments for the current gasoline benzene program, the Agency commits to issuing a guidance document and conducting a webinar to educate stakeholders not only on compliance requirements of the current program but also potential changes under discussion as part of the Agency's forthcoming fuels regulation streamlining rulemaking which is expected to be proposed in 2020 (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=2018 10&RIN=2060-AT31). The guidance and webinar are expected to cover the following subjects: □ Gasoline benzene program requirements □ what the requirements are and who is subject to them; □ Averaging, Banking, and Trading Program; □ Sampling, Tesing, and Retention requirements; □ Recordkeeping and reporting requirements, including information on how to use EPA□s reporting forms and fuel compliance information systems; □ Attest engagements; and □ Violations and penalties. Status: Adhering	
18-P00181-140	Recommendation 1: Define performance measures to assess the performance of the EPA's light-duty vehicle compliance program.	2018-05-15
	Corrective Action 1-1: *Planned:* 2021-03-31 *Completed*: 0000-00-00 OAR agrees with this recommendation. OAR currently uses in-use vehicle emissions testing data to track light-duty emissions compliance over time. OAR will develop additional performance measures to better monitor emissions compliance and program success. OAR will implement this recommendation in four phases: 1) develop the performance measures; 2) implement, gather data, and evaluate; 3) revise measures as informed by evaluation, then fully implement	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	measures; and 4)use those measures to inform program management moving forward. We project that this will be a three-year process. Step one will be completed by the end of Q2, FY2019. Step two will be completed at the end of Q2, FY2020, and step three will be completed at the end of Q2, FY2021. Step 4 is ongoing. Status: Adhering	
18-P00241-140	Recommendation 1: Revise the Office of Air Quality Planning and Standards. Quality Management Plan to state whether the agency is developing quality assurance project plans or equivalent documents to meet EPA Quality System requirements for developing or revising preferred air quality dispersion models.	2018-09-05
	Corrective Action 1-1: *Planned:* 2020-03-31 *Completed:* 0000-00-00 In response to this recommendation, EPA proposes the following action: 1. The AQMG Manager will coordinate with the OAQPS QA Manager to modify the OAQPS QMP so that it clearly states how the process for developing and revising preferred air quality models is conducted and adheres to EPA Quality System requirements. Status: Adhering	
	Recommendation 2: Develop a quality assurance project plan or equivalent documents describing the results of systematic planning before developing a new air quality dispersion model or undertaking any significant revisions in the future to existing preferred air quality dispersion models, which are codified in Appendix A to Appendix W of 40 CFR Part 51.	
	Corrective Action 2-1: *Planned:* 2020-03-31 *Completed:* 0000-00-00 In response to this recommendation, EPA proposes the following action: 1. EPA will develop the AERMOD System Development and Update Plan. The plan serves several functions. In addition to generally describing the SOPs for model development, the plan will provide detailed descriptions of the model development and update process outlined in EPA's Guideline which relies upon EPA's ADP requirements for the federal rulemaking process. The ADP process provides a robust process and documentation that ensures quality of its regulatory actions such that the model development and update process meets EPA's Quality System requirements. 2. As noted in the OIG report, EPA provides extensive documentation on model performance, function, and application (e.g., the AERMOD User's Guide, the AERMOD Formulation and Evaluation Document, and the AERMOD Implementation Guide). We believe these documents provide the documentation necessary to meet EPA's Quality System requirements. The connections between these documents and these requirements will be spelled out in updates to the OAQPS QMP (see response to recommendation 3). Status: Adhering	
18-P00283-140	Recommendation 1: Revise the vehicle inspection and maintenance rule to remove the cross reference to Title 40 S51.353(b)(1) of the Code of Federal Regulations, and provide defined evaluation methodology guidance to enable states to quantify emission reductions.	2018-09-25
	Corrective Action 1-1: *Planned:* 2019-06-30 *Completed:* 0000-00-00	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	OAR agrees with this recommendation and, as noted by OIG in its draft report, intends to direct OTAQ to revise the I/M rule to remove the reference the next time the rule is revised for more substantial revisions. Additionally, and in the interim, OAR will direct OTAQ to issue guidance to clarify this provision as well as that enhanced I/M programs that are not already using some other approved program evaluation methodology should be using the OTAQ guidance document issued in July 2004, Guidance on Use of Remote Sensing for Evaluation of I/M Program Performance (EPA420-B-04-010). Update 6/27/19 - While there was a delay due to the shutdown, beginning in February 2019, OAR directed OTAQ to begin the response to this recommendation. OTAQ is currently drafting interim guidance to clarify the regulatory reference and existing guidance and other potential methods for enhanced I/M evaluation methodology requirements. OTAQ is consulting with EPA Regional Offices and OGC in the developing of this guidance, which will be finalized and distributed by the fall of 2019. Status: Delayed	
	Recommendation 2: Develop and implement guidance on the calculation of individual test statistics in state reports to provide consistency in state reports across regions.	
	Corrective Action 2-1: *Planned:* 2019-06-30 *Completed:* 0000-00-00 OAR agrees with this recommendation and will respond by directing OTAQ to issue guidance clarifying how program statistics such as the rates of vehicle failures, waivers, and disappearing vehicles should be calculated. Update 6/27/19 - While there was a delay due to the shutdown, beginning in February 2019, OAR directed OTAQ to begin the response to this recommendation. OTAQ has drafted this guidance to improve the calculation of individual test statistics and to provide national consistency in state reports. OTAQ is consulting with EPA Regional Offices and OGC in the developing of this guidance, which will be finalized and distributed by the fall of 2019. OTAQ also updated state jurisdictions on the draft concepts for this guidance, and OTAQ will incorporate feedback received into its development. Status: Delayed	
	Recommendation 3: Issue guidance to address any trends or common problems identified by the outreach conducted to states with deficiencies in program implementation.	
	Corrective Action 3-1: *Planned:* 2020-03-31 *Completed:* 0000-00-00 OAR agrees with the recommendation and views the appropriate response to it as an extension of our response to Recommendation 6, with appropriate OTAQ guidance to be issued to address identified deficiencies. Status: Adhering	
19-P00168-140	Recommendation 1: Define performance measures to assess the performance of the EPA's on-road heavy-duty vehicle and engine compliance program.	2019-06-03
	Corrective Action 1-1: *Planned:* 2022-09-30 *Completed:* 0000-00-00	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	OAR agrees with this recommendation. OAR currently uses in-use vehicle emissions testing data to track heavy-duty emissions compliance over time. OAR will develop additional performance measures to better monitor emissions compliance and program success. Status: Adhering	
	Recommendation 2: Conduct and document a risk assessment for the on-road heavy-duty vehicle and engine compliance program that prioritizes risk and links specific control activities to specific risks. Update the risk assessment on a scheduled and periodic basis.	
	Corrective Action 2-1: *Planned:* 2021-06-30 *Completed:* 0000-00-00 OAR agrees with this recommendation. OAR currently conducts an informal risk assessment of its heavy-duty vehicle compliance program and started implementing and documenting a formal process for both light-and heavy-duty sectors in 2018 in response to OIG's recommendation for the light-duty program. OAR will continue to expand and formalize this process and will develop protocols for its implementation and documentation. Status: Adhering	
	Recommendation 3: Address the following risks as part of the on-road heavy-duty vehicle and engine compliance program risk assessment, in addition to other risks that the 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. 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 3-1: *Planned:* 2021-09-30 *Completed:* 0000-00-00 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.	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	□ 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: End of Q1 2021. □ Different compliance challenges for heavy-duty compression-ignition 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: End of Q3 2021. □ 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 risk assessment. Planned Completion Date: End of Q3 2021. Status: Adhering	
	Recommendation 4: 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) the 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 4-1: *Planned:* 2022-09-30 *Completed:* 0000-00-00 OAR agrees with this recommendation. We will consider the first three issues as part of the CTI rulemaking process. We will also 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. Status: Adhering	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	Recommendation 5: Conduct and document an evaluation of opportunities to reassess the manufacturer in-use testing program, including the use of targeted, nonstandard testing in areas of concern.	
	Corrective Action 5-1: *Planned:* 2020-09-30 *Completed:* 0000-00-00 OAR agrees with this recommendation. OTAQ will address this issue through the CTI rulemaking process. Status: Adhering	
	Recommendation 6: Develop and implement procedures for communicating potential compliance issues to the EPA's Office of Enforcement and Compliance Assurance. a. Establish clear criteria for when compliance issues should be referred to the EPA's Office of Enforcement and Compliance Assurance.	
	Corrective Action 6-1: *Planned:* 2020-09-30 *Completed:* 0000-00-00 OAR agrees with this recommendation and already does this informally. We will coordinate with OECA to formalize and better document the process. Status: Adhering	
19-P00207-140	Recommendation 1: Develop and implement electronic checks in the EPA's 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 the EPA.	2019-06-27
	Corrective Action 1-1: *Planned:* 2025-03-31 *Completed:* 0000-00-00 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. 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 re-engineering 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. Status: Adhering	

FY Audit Number	Recommendations and Corrective Actions	Report Date
19-P00251-140	Recommendation 1: 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.	2019-07-30
	Corrective Action 1-1: *Planned:* 2022-03-31 *Completed:* 0000-00-00 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. Status: Adhering	
	Recommendation 2: Develop stack test report checklists for EPA Method 5 and other frequently used EPA methods to assist state, local and tribal agencies in their reviews of stack test plans and reports.	
	Corrective Action 2-1: *Planned:* 2021-06-30 *Completed:* 0000-00-00 OAR will implement the following corrective action. OAQPS will work with EPA regions, state, local and tribal air agencies to develop checklists useful for review of stack test plans, and stack test reports for EPA Method 1, Method 2, Method 3, Method 4, Method 5, Method 7E, and Method 10. OAQPS will provide this content as informational and not to be used as official Regulatory Guidance. We anticipate that it will take approximately 18 months for these checklists to be finalized. Status: Adhering	
19-P00252-140	Recommendation 1: (1) In consultation with the General Counsel, the Designated Agency Ethics Official, and the Assistant Administrator for Research and Development, revise EPA Delegation of Authority 7-170 to enable practical implementation for the acceptance of donated property consistent with Section 104 of the Clean Air Act and address pertinent ethics considerations.	2019-07-31
	Corrective Action 1-1: *Planned:* 2020-09-30 *Completed:* 0000-00-00 OAR supports Recommendation 1 and has already begun consulting with the Director of the Ethics Office, who is the Alternate Designated Agency Ethics Official, in support of this recommendation. OAR acknowledges that existence of the delegation was not previously known to current OTAQ employees and, now that we are aware of it, OTAQ also agrees that the current delegation is impractical. We commit to work expeditiously with the Office of General Counsel (including the media, appropriations, and ethics lawyers) to develop an Office level policy/process and to revise the existing delegation of authority.	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	Update 1/16/2020 - As part of the Corrective Action #1 in the OIG report "EPA's 2017 Glider Vehicle Testing Complied with Standard Practices" (#19-P-0252), OTAQ agreed to consult with EPA's Ethics Office to evaluate the need for an interim policy while it sought the revision to existing Delegation of Authority 7-170 regarding the acceptance of donated property under section 104 of the Clean Air Act. As part of this evaluation, an examination of research that would benefit from the acceptance of test articles under existing Delegation of Authority 7-170 found that published rulemaking documents provided adequate notice to potential sources of donations such that it was unnecessary in the near term to establish an alternative process for notifying potential donors. OTAQ therefore utilized the existing delegation to document the request to permit the acceptance of donated property from the Acting Assistance Administrator for the Office of Air and Radiation. This concurrence from the Acting AA, in consultation with the Alternate Designated Agency Ethics Official, was obtained in July of 2019 in writing and obviated the near term need for an office level policy. This met the commitment to "evaluate and document" whether OTAQ needed further guidance or policies to implement the Delegation of section 104 of the CAA by the end of Q1 of FY2020. OTAQ is currently working to initiate a revised delegation that will be more practical by the end of Q4 FY 2020. Status: Adhering	
	Recommendation 2: (2) In consultation with the General Counsel and the Designated Agency Ethics Official, evaluate and document whether the Office of Transportation and Air Quality needs to develop further guidance or policies to implement the Delegation of Authority for the acceptance of donated property under Section 104 of the Clean Air Act and, if determined necessary, develop further guidance or policies as appropriate.	
	Corrective Action 2-1: *Planned:* 2020-09-30 *Completed:* 0000-00-00 OAR agrees with this recommendation. OAR is currently working with the Office of General Counsel and the Alternate Designated Agency Ethics Official to develop an interim OTAQ policy/process for the acceptance of donated property under Section 104 of the Clean Air Act. OAR also intends to finalize an office policy in conjunction with a revised delegation memo. OAR also agrees that the current delegation is impractical and would benefit from revision. Status: Adhering	
19-F00003-150	Recommendation 1: Perform a review of system requirements and evaluate the suitability of existing technology to replace or implement updates to the computer room's surveillance system and generators. Update or replace, if warranted, the equipment based on the results of the evaluation.	2018-11-14
	Corrective Action 1-1: *Planned:* 2022-01-15 *Completed:* 0000-00-00 The surveillance system will be upgraded and deficiencies corrected as part of the ePACs installation on campus. Status: Adhering	

FY Audit Number	Recommendations and Corrective Actions	Report Date
17-P00053-164	Recommendation 1: 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.	2016-12-12
	Corrective Action 1-1: *Planned:* 2018-11-30 *Completed:* 0000-00-00 Within two years of the final report, by November 30, 2018, OCSPP will validate and implement new device clearance guidance. Status: Delayed	
17-P00395-164	Recommendation 1: Develop and implement a plan to reduce excess Pesticides Reregistration and Expedited Processing Fund and Pesticide Registration Fund balances within the established target range.	2017-09-18
	Corrective Action 1-1: *Planned:* 2020-12-31 *Completed:* 0000-00-00 Assess progress in achieving 2020 spend down projections, as described in 11/13/17 memo from OCSPP to OIG entitled "Response to Final Report: EPA Needs to Manage Pesticide Funds More Efficiently," Report No. 17-P-0395. Status: Adhering	
	Corrective Action 1-2: *Planned:* 2021-12-31 *Completed:* 0000-00-00 Assess progress in achieving 2021 spend down projections, as described in 11/13/17 memo from OCSPP to OIG entitled "Response to Final Report: EPA Needs to Manage Pesticide Funds More Efficiently," Report No. 17-P-0395. Status: Adhering	
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.	2018-02-15
	Corrective Action 1-1: *Planned:* 2022-12-31 *Completed:* 0000-00-00 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 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. Status: Adhering	
18-P00281-164	Recommendation 1: Develop and implement applicable outcome-based performance measures to demonstrate the human health and environmental effects of the EPA's emergency exemption decisions.	2018-09-25

FY Audit Number	Recommendations and Corrective Actions	Report Date
	Corrective Action 1-1: *Planned:* 2020-06-30 *Completed:* 0000-00-00 By June 30, 2020, OCSPP will develop a relevant outcome measure or measures that better demonstrates the way the emergency exemption process, supported by scientific risk assessment, maintains environmental and human health safeguards. Possible indicators include the number of Section 18s that transition to full Section 3 approval (with exceptions) over time. Status: Adhering	
	Recommendation 2: Develop concise emergency exemption application guidance that specifies the minimum requirements of an application submission and is available on the Office of Pesticide Programs Section 18 website.	
	Corrective Action 2-1: *Planned:* 2020-09-30 *Completed:* 0000-00-00 By September 30, 2020, OCSPP will identify and add additional information to its website that assists applicants in accurately and consistently completing applications for Section 18 emergency exemptions on their first submission. Status: Adhering	
	Recommendation 3: Provide clear guidance to state lead agencies on how and when they can use efficacy data from other state lead agencies to satisfy the emergency exemption application criteria.	
	Corrective Action 3-1: *Planned:* 2020-09-30 *Completed:* 0000-00-00 By September 30, 2020, OCSPP will use the appropriate venue or information process to inform the applicants and other stakeholders that data submitted in the emergency exemption application to address the expected efficacy of a proposed use do not need to be state-specific. If suitable, this may be incorporated into the additional information added to the website under Recommendation 5. Status: Adhering	
	Recommendation 4: Expand the data presented in the Office of Pesticide Programs Section 18 database by considering additional data points, such as application acreage requested, actual acreage applied and registration status of each exempted pesticide.	
	Corrective Action 4-1: *Planned:* 2020-06-30 *Completed:* 0000-00-00 By June 3, 2020, OCSPP will expand the Emergency Exemption Public Database by including, for example, requested application acreage, actual application acreage, and current registration status of each approved emergency exemption use. Status: Adhering	
19-P00195-164	Recommendation 1: 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.	2019-06-21
	Corrective Action 1-1: *Planned:* 2020-12-31 *Completed:* 0000-00-00 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. Status: Adhering	

FY Audit Number	Recommendations and Corrective Actions	Report Date
19-P00275-164	Recommendation 1: Using survey data, determine how the EPA will assist states with implementing their Managed Pollinator Protection Plans.	2019-08-15
	Corrective Action 1-1: *Planned:* 2020-06-30 *Completed:* 0000-00-00 Duplicate/erroneous entry. Please delete. Status: Adhering	
	Corrective Action 1-2: *Planned:* 2020-06-30 *Completed:* 0000-00-00 OCSPP accepts this recommendation and plans to interact with and engage States and Tribal Nations that choose to develop pollinator protection programs. OCSPP projects that this task can be completed in June 2020. Status: Adhering	
	Recommendation 2: Determine whether and how the EPA will help states address additional areas of concern, such as chronic pesticide risks and other limitations identified by stakeholders, through their Managed Pollinator Protection Plan implementation efforts.	
	Corrective Action 2-1: *Planned:* 2020-06-30 *Completed:* 0000-00-00 CA 4: OCSPP accepts this recommendation to determine whether and how the EPA will help States and Tribal Nations that choose to develop pollinator protection programs address additional areas of concern (e.g., chronic pesticide risks), while respecting the boundaries in which the EPA works with States/Tribal Nations to promote these voluntary plans. Status: Adhering	
	Recommendation 3: Develop and implement a strategy that will use Managed Pollinator Protection Plan survey data to measure the national impact of the Managed Pollinator Protection Plans.	
	Corrective Action 3-1: *Planned:* 2020-02-28 *Completed:* 0000-00-00 CA 1: The Office of Chemical Safety and Pollution Prevention (OCSPP) accepts this recommendation and will develop and implement a strategy that utilizes the AAPCO/SFIREG survey data to measure the effectiveness of state Managed Pollinator Protection Plans from a national perspective. OCSPP will develop and implement this strategy by February 2020. Status: Adhering	
	Recommendation 4: Using survey data, fully communicate to states what Managed Pollinator Protection Plan implementation assistance is available from the EPA and how this assistance will be provided.	
	Corrective Action 4-1: *Planned:* 2020-06-30 *Completed:* 0000-00-00 OCSPP accepts this recommendation to communicate to states what Managed Pollinator Protection Plan implementation assistance is available from EPA and how this assistance is to be provided in the future. To accomplish this goal, OCSPP will develop a presentation on the results of the AAPCO/SFIREG survey and on MP3 implementation assistance for states and will deliver that presentation to SFIREG by June 2020. In	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	addition, OCSPP will continue to communicate regularly with states on these issues and will maintain pollinator protection as a standing agenda item in discussions with the SFIREG. Status: Adhering	
	Recommendation 5: Determine how the EPA can use the Managed Pollinator Protection Plan survey results to advance its National Program Manager Guidance goals and its regulatory mission.	
	Corrective Action 5-1: *Planned:* 2021-06-30 *Completed:* 0000-00-00 OCSPP accepts the recommendation to utilize the AAPCO/SFIREG survey results to advance the program's National Program Management Goals (NPMG1). OCSPP will use the information provided from the AAPCO/SFIREG survey to revise applicable NPMGs at the next available opportunity in the cycle of NPMG planning. OCSPP projects this task will be completed in June 2021. Status: Adhering	
19-P00302-164	Recommendation 1: Establish the Lead-Based Paint Renovation, Repair and Painting Rule Program's objectives, goals and measurable outcomes, such as measures to demonstrate the effectiveness of program contributions toward decreasing elevated blood lead levels.	2019-09-09
	Corrective Action 1-1: *Planned:* 2020-12-31 *Completed:* 0000-00-00 OCSPP will develop one or more performance measures to meaningfully demonstrate the effectiveness of the Lead RRP program's contributions to the protection of public health and the environment. Status: Adhering	
	Recommendation 2: Establish specific guidelines for resources and funding allocated to the Lead-Based Paint Renovation, Repair and Painting Rule Program that will further the goals of the Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts.	
	Corrective Action 2-1: *Planned:* 2020-12-31 *Completed*: 0000-00-00 OCSPP will establish guidelines for resources and funding allocated to the Lead-Based Paint RRP Rule Program that will further the goals of the Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts. Status: Adhering	
18-P00240-166	Recommendation 1: Build capacity for managing the use of citizen 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 the 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 the EPA has used results of its investment in citizen science.	2018-09-05
	Corrective Action 1-1: *Planned:* 2020-12-31 *Completed:* 0000-00-00	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	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 highlighting project successes and how EPA has used results of its investment in citizen science. Status: Adhering	
	Recommendation 2: Finalize, in coordination with the Office of Environmental Information and Region 1, the Draft Quality Assurance Handbook for Citizen Science, and communicate to agency staff and citizen science groups the availability and content of this handbook.	
	Corrective Action 2-1: *Planned:* 2020-12-31 *Completed:* 0000-00-00 ORD and OEI will jointly finalize the Draft Quality Assurance Handbook for Citizen Science because the EPA's Office of Environmental Information has the responsibility for the Agency's Quality System, including issuance of national Quality Assurance guidance, and EPA's Office of Research and Development has the responsibility for building the Agency's capacity for managing the use of citizen science. After issuing the report, EPA will implement an external and internal outreach and communications plan to help EPA, states and tribes, and citizen science groups to strengthen quality assurance practices. Status: Adhering	
19-P00123-166	Recommendation 1: Verify and update information for Regional Applied Research Effort projects in the Regional Science Program Tracker.	2019-04-18
	Corrective Action 1-1: *Planned:* 2020-10-01 *Completed:* 0000-00-00 ORD concurs with this recommendation. As the OIG highlighted in the report on page 6, the RSP Tracker was launched in 2015 and includes new data fields that were not originally required for older projects. RSLs and OSP will verify and update information for all RARE projects in the RSP Tracker that were funded in 2015 and beyond. Status: Adhering	
	Recommendation 2: Update the Regional Applied Research Effort Program Annual Process Guidelines to require that Regional Science Liaisons use the Regional Science Program Tracker and increase awareness of the system among regional staff as a one-stop source of information on regional research projects.	
	Corrective Action 2-1: *Planned:* 2020-10-01 *Completed:* 0000-00-00 ORD concurs with this recommendation. Prior to sending out the latest solicitation in October 2018, ORD amended the RARE guidelines to clarify that RSLs are responsible for entering project data in the tracker and that ORD leads are responsible for providing that information to RSLs. Additionally, the draft RSL Implementation Plan identifies best practices for RSLs, including: 1) Hosting events in regions related to RARE, RESES and other Regional Science Program opportunities. 2) Highlighting the RSP tracker database as a one-stop source of information on regional research projects. ORD also plans to perform the following outreach on the RSP Tracker: 1) Hosting webinars on the existing RSP tracker for ORD and the	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	regions in coordination with the RSLs. 2) Developing a communication plan to roll out the fully revised RSP Tracker to ORD and the regions. Status: Adhering	
	Recommendation 3: Complete data entry of all Regional Sustainability and Environmental Sciences projects into the Regional Science Program Tracker.	
	Corrective Action 3-1: *Planned:* 2020-10-01 *Completed:* 0000-00-00 ORD concurs with this recommendation. ORD will continue to work with the support contractor to expand the RSP Tracker infrastructure to include RESES projects. ORD will work with the RSLs to complete data entry of RESES project records into the RSP tracker. Status: Adhering	
	Recommendation 4: Update the Regional Science Program Tracker to improve Regional Applied Research Effort/Regional Sustainability and Environmental Sciences project tracking by including: a. A timeline with significant dates/milestones and events. b. Significant products/outputs that stem from a project, including interim products/outputs to show project progress prior to completion/final report. c. A feature to prompt staff to add impacts and/or evidence of use of project results in decision-making.	
	Corrective Action 4-1: *Planned:* 2020-10-01 *Completed:* 0000-00-00 ORD concurs with this recommendation. 3a and b: ORD will continue working with the support contractor to redesign and reconfigure RSP Tracker data fields to more intuitively display key milestones, status updates and interim and final project products. 3c: ORD plans to update the RSP Tracker data fields to capture project impacts at project completion and post-completion. ORD will enable the system to send post-completion prompts to RARE and RESES project teams to add evidence of use and impacts of project results. Status: Adhering	
19-P00277-166	Recommendation 1: 1. Submit to the Office of Management and Budget for review an information collection request to be allowed to survey more than nine nonfederal external customers regarding research products meeting customer needs. Should the Office of Management and Budget not grant approval of the information collection request, develop alternatives to assess non-federal external customer satisfaction to more fully inform reporting under the strategic measure.	2019-08-19
	Corrective Action 1-1: *Planned:* 2021-07-30 *Completed:* 0000-00-00 ORD will complete the ICR to survey external stakeholders of ORD's scientific research products and submit it to OMB for approval. In the event that OMB rejects the ICR, ORD will work to identify alternative data collection methods that will capture non-federal customer satisfaction. If this were the case, ORD would plan to begin collecting non-federal customer satisfaction data in accordance with Fiscal Year 2021 data collection. July 30, 2021 in the event that OMB rejects the ICR. Status: Adhering	

FY Audit Number	Recommendations and Corrective Actions	Report Date
12-P00253-167	Recommendation 1: 1d. Improve oversight of facilities regulated by EPA's oil pollution prevention program by: Producing a biennial public assessment of the quality and consistency of SPCC Plans and FRPs based on inspected facilities.	2012-02-06
	Corrective Action 1-1: *Planned:* 2013-10-30 *Completed:* 0000-00-00 A summary of findings will be developed by October, 2013. These findings will help to identify areas where additional guidance and outreach are needed to improve the quality and consistency of SPCC Plans. July 2017 Update: The OLEM Acting AA approved the revision of this milestone date from 06/30/2017 to 06/30/2020. OEM is initiating work on the SPCC corrective action and will complete it by the end of December 2018. OEM will then, based on the process developed for the SPCC corrective action, initiate and complete the FRP corrective action by the end of June 2020. However, reduced extramural resources, available personnel, program implementation priorities (including program/inspection support and training) and new program priorities delay completion of this milestone. In addition, while the regulatory work associated with and the SPCC rule amendments due to the Water Resources Reform and Development Act (WRRDA) have been put on hold, any regulatory changes to the SPCC rule due to the pending FUELS ACT may also shift priorities on the SPCC program. (The OLEM Acting AA notified the OIG AIG, Carolyn Copper, via email on 07/07/2017.) December 2014 Update: The OSWER AA approved the revision of this milestone date from 10/30/13 to 12/31/14. However, reduced extramural resources and available personnel, program implementation priorities including inspections, and new priority concerns for oil spill response associated with increased oil transportation have delayed, and will continue to delay, effort on this milestone for at least a year or more. In addition, recent enactment of the Water Resources Reform and Development Act (WRRDA) place priority responsibilities on the SPCC program for the next 2 years. Consequently, action on this corrective action cannot begin before June, 2017. December 2013 Update: The OSWER AA approved the revision of this milestone date from 10/30/13 to 12/31/14. Work to complete revisions to the Guidance for Inspectors, review of Keystone pipeline environmental impact analyses, reduced extramural resources and available personnel, completion of targeting and close-out inspection memo policy guidelines, program implementation priorities including inspections, and furloughs have delayed effort on this milestone. By June 2014, we will collect SPCC Plans and Inspection reports from the regions according to a pilot protocol we've developed. This step will be followed by review, assessment, determination of next steps and summarization of findings for completion	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	by 12/31/14. (The OIG was notified via an email from the OSWER AA to Art Elkins on 12/19/13.) Status: Delayed	
	Corrective Action 1-2: *Planned:* 2013-09-30 *Completed:* 0000-00-00 The model developed for the SPCC program will then be used to develop a review protocol for FRPs by September, 2013, to examine FRP inspections conducted during the FY 2013 inspection cycle. July 2017 Update: The OLEM Acting AA approved the revision of this milestone date from 06/30/2017 to 06/30/2020. OEM is initiating work on the SPCC corrective action and will complete it by the end of December 2018. OEM will then, based on the process developed for the SPCC corrective action, initiate and complete the FRP corrective action by the end of June 2020. However, reduced extramural resources, available personnel, program implementation priorities (including program/inspection support and training) and new program priorities delay completion of this milestone. In addition, while the regulatory work associated with and the SPCC rule amendments due to the Water Resources Reform and Development Act (WRRDA) have been put on hold, any regulatory changes to the SPCC rule due to the pending FUELS ACT may also shift priorities on the SPCC program. (The OLEM Acting AA notified the OIG AIG, Carolyn Copper, via email on 07/07/2017.) December 2014 Update: The OSWER AA approved the revision of this milestone date from 10/30/13 to 12/31/14. However, reduced extramural resources and available personnel, program implementation priorities including inspections, and new priority concerns for oil spill response associated with increased oil transportation have delayed, and will continue to delay, effort on this milestone for at least a year or more. In addition, recent enactment of the Water Resources Reform and Development Act (WRRDA) place priority responsibilities on the SPCC program for the next 2 years. Consequently, action on this corrective action cannot begin before June, 2017. December 2013 Update: The OSWER AA approved the revision of this milestone date from 12/31/13 to 12/31/14. Work to complete revisions to the Guidance for Inspectors, review of Keystone pipeline environmental impact analyses, reduced extramural resources and available personnel, completion of targeting and close-out inspection memo policy guidelines, program implementation priorities including inspections, and furloughs have delayed effort on this milestone. By June 2014, we will collect SPCC Plans and Inspection reports from the regions according to a pilot protocol we've developed. This step will be followed by review, assessment, determination of next steps and summarization of findings for completion by 12/31/14. (The OIG was notified via an email from the OSWER AA to Art Elkins on 12/19/13.)	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	September 2013 Update: The OSWER AA approved the revision of this milestone date from 09/30/13 to December 31, 2013. Although preliminary work of an SPCC pilot is essentially complete, collection of Plans from the regions and their review and evaluation is delayed due to availability of HQ staff and furloughs, and other priority assignments including Keystone XL review, an oil pipeline spill, SPCC and FRP compliance reviews, responses to legislative initiatives on farms and SPCC and completion of the SPCC Guidance for Inspectors. Status: Delayed	
	Corrective Action 1-3: *Planned:* 2014-10-30 *Completed:* 0000-00-00 A summary of findings will be developed by October 2014. These findings will help to identify areas where additional guidance and external outreach are needed to improve the quality and consistency of FRPs. July 2017 Update: The OLEM Acting AA approved the revision of this milestone date from 06/30/2017 to 06/30/2020. OEM is initiating work on the SPCC corrective action and will complete it by the end of December 2018. OEM will then, based on the process developed for the SPCC corrective action, initiate and complete the FRP corrective action by the end of June 2020. However, reduced extramural resources, available personnel, program implementation priorities (including program/inspection support and training) and new program priorities delay completion of this milestone. In addition, while the regulatory work associated with and the SPCC rule amendments due to the Water Resources Reform and Development Act (WRRDA) have been put on hold, any regulatory changes to the SPCC rule due to the pending FUELS ACT may also shift priorities on the SPCC program. (The OLEM Acting AA notified the OIG AIG, Carolyn Copper, via email on 07/07/2017.) December 2014 Update: The OSWER AA approved the revision of this milestone date from 10/30/13 to 12/31/14. However, reduced extramural resources and available personnel, program implementation priorities including inspections, and new priority concerns for oil spill response associated with increased oil transportation have delayed, and will continue to delay, effort on this milestone for at least a year or more. In addition, recent enactment of the Water Resources Reform and Development Act (WRRDA) place priority responsibilities on the SPCC program for the next 2 years. Consequently, action on this corrective action cannot begin before June, 2017. December 2013 Update: The OSWER AA approved the revision of this milestone date from 12/31/13 to 12/31/14. Work to complete revisions to the Guidance for Inspectors, review of Keystone pipeline environmental impact analyses, reduced extramural resources and available personnel, completion of targeting and close-out inspection memo policy guidelines, program implementation priorities including inspections, and furloughs have delayed effort on this milestone. By June 2014, we will collect SPCC Plans	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	and Inspection reports from the regions according to a pilot protocol we've developed. This step will be followed by review, assessment, determination of next steps and summarization of findings for completion by 12/31/14. (The OIG was notified via an email from the OSWER AA to Art Elkins on 12/19/13.) Status: Delayed	
13-P00178-167	Recommendation 1: Revise inspection guidance to recommend minimum inspection scope for the various types of facilities covered under the program and provide more detailed examples of minimum reporting. Corrective Action 1-1: Planned: 2014-07-31 Completed: 0000-00-00 Publish final guidance which specifies minimum inspection scope and examples for various types of inspections to assist Regions in focusing their limited resources on the most significant issues at facilities. May 2018 Update: The OLEM Acting AA approved the revision of this milestone date from February 28, 2019 to June 30, 2022. The new date is based on the completion date of RMP Reconsideration rule. OLEM will need at least 2 years after its completion to start the development of guidance which will specify the minimum inspection scope for each of the facility types regulated by the RMP program and revise reporting guidance to provide detailed examples of compliance. Following completion of the final regulation, EPA will be required to revise the RMP on-line reporting system and over a dozen guidance documents to incorporate the regulatory changes. This effort will take 2-3 years and must be completed in that timeframe to give facilities time to review the guidance and comply with the new requirements under the RMP program. Therefore, this action item should be delayed until after the completion of that work. (The OLEM Acting AA notified the OIG via email on May 15, 2018.) For recommendation #1: July 2017 Update: The OLEM Acting AA approved the revision of this milestone date from September 30, 2018 to February 2019. This action requires development of guidance which will specify the minimum inspection scope for each of the facility types regulated by the RMP program and revise reporting guidance to provide detailed examples of compliance. Recently, EPA published a final rule extending the effective date on the January 2017 revised RMP rule to February 2019. For the next 20 months, EPA will be engaged in drafting and publishing a proposed and final rule. Following completion of the final regulation, EPA will be required to revise the RMP on-line reporting system and over a dozen guidance documents to incorporate the regulatory changes. This effort will take 2-3 years and must be completed in that timeframe to give facilities time to review the guidance and comply with the new requirements under the RMP program. Therefore, this action item should be delayed until after the completion of that work. (The OLEM Acting AA notified the OIG AIG, Carolyn Copper, via email on 07/07/2017.)	2013-03-21

FY Audit Number	Recommendations and Corrective Actions	Report Date
	March 2016 Update: The OLEM AA approved to revise the corrective action milestone date from September 30, 2016, to September 30, 2018. This action requires development of guidance which will specify the minimum inspection scope for each of the facility types regulated by the RMP program and revise reporting guidance to provide detailed examples of compliance. Currently the Administration's priority is to complete a final RMP regulation by late 2016/early 2017. Following completion of the final regulation, EPA will be required to revise the RMP on-line reporting system and over a dozen guidance documents to incorporate the regulatory changes. This effort will take 2-3 years and must be completed in that timeframe to give facilities time to review the guidance and comply with the new requirements under the RMP program. Therefore, this OIG action item must be delayed until after the completion of that work. (The OIG was notified via an email from the OLEM AA to Art Elkins on 03/11/2016.) July 2014 Update: The OSWER AA approved to revise the corrective action date from 07/31/14 to 09/30/16. This corrective action has been overtaken by actions and deadlines associated with implementation of Executive Order 13650, Improving Chemical Facility Safety and Security, which lays out a comprehensive set of actions to advance chemical facility safety and security, including federal coordination on inspections. We anticipate the guidance will take a year to complete once we start. (The OIG was notified of this delay via an email from the OSWER AA to the Inspector General dated 07/30/14). Status: Delayed	
	Recommendation 2: Develop and implement an inspection monitoring and oversight program to better manage and assess the quality of program inspections, reports, supervisory oversight, and compliance with inspection guidance.	
	Corrective Action 2-1: *Planned:* 2014-09-30 *Completed:* 0000-00-00 OSWER and OECA are working with the Regions to identify key components of a repository of inspection reports in order to better ensure and assess the quality of RMP inspections. This repository system will be developed by the end of FY2014. May 2018 Update: The OLEM Acting AA approved the revision of this milestone date from February 28, 2020 to June 30, 2023. The new date is based on the completion date of RMP Reconsideration rule. OLEM will need at least 3 years after its completion to start the development of an on-line system for the Regions to file/submit each of their inspection reports. This system must allow for quality control and the ability to not only assess the quality of the inspection reports but identify trends and issues at RMP facilities in order to better target our inspection efforts. Following completion of the final regulation, EPA will be required to revise the RMP on-line reporting system and over a dozen guidance documents to incorporate the regulatory changes. This action will take approximately one year to complete following the completion of the guidance	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	in corrective action 1-1 above. Therefore, this action item should be delayed until after the completion of that work. (The OLEM Acting AA notified the OIG via email dated May 15, 2018.) For recommendation #2: July 2017 Update: The OLEM Acting AA approved the revision of this milestone date from September 30, 2019 to February 2020. This action requires the development of an on-line system for the Regions to file/submit each of their inspection reports. This system must allow for quality control and the ability to not only assess the quality of the inspection reports but identify trends and issues at RMP facilities in order to better target our inspection efforts. Recently, EPA published a final rule extending the effective date on the January 2017 revised RMP rule to February 2019. For the next 20 months, EPA will be engaged in drafting and publishing a proposed and final rule. Following completion of the final regulation, EPA will be required to revise the RMP on-line reporting system and over a dozen guidance documents to incorporate the regulatory changes. This action will take approximately one year to complete following the completion of the guidance in corrective action 1-1 above. Therefore, this action item should be delayed until after the completion of that work. (The OLEM Acting AA notified the OIG AIG, Carolyn Copper, via email on 07/07/2017.) March 2016 Update: The OLEM AA approved to revise the corrective action milestone date from March 30, 2017, to September 30, 2019. This action requires the development on an on-line system for the Regions to file/submit each of their inspection reports. This system must allow for quality control and the ability to not only assess the quality of the inspection reports but identify trends and issues at RMP facilities in order to better target our inspection efforts. Currently the Administration's priority is to complete a final RMP regulation by late 2016/early 2017. Following completion of the final regulation, EPA will be required to revise the RMP on-line reporting system and over a dozen guidance documents to incorporate the regulatory changes. This effort will take 2-3 years and must be completed in that timeframe to give facilities time to review the guidance and comply with the new requirements under the RMP program. Therefore, this OIG action item must be delayed until after the completion of that work. This action will take approximately one year to complete following the completion of the guidance in corrective action 1-1 above. (The OIG was notified via an email from the OLEM AA to Art Elkins on 03/11/2016.) July 2014 Update: The OSWER AA approved to revise the corrective action date from 09/30/14 to 03/31/17. This corrective action has been overtaken by actions and deadlines associated with implementation of Executive Order 13650, Improving Chemical Facility Safety and Security, which lays out a comprehensive set of actions to advance chemical facility safety and security, including federal coordination on inspections. We anticipate the repository will take 18 months to 2 years to complete once	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	we start. (The OIG was notified of this delay via an email from the OSWER AA to the Inspector General dated 07/30/14). Status: Delayed	
18-P00059-167	Recommendation 1: RECOMMENDATION 2. Once the study in Recommendation 1 is complete, use the information to develop appropriate risk management actions to mitigate any identified problems in line with Agency practices for enterprise risk management under Office of Management and Budget Circular A-123, and determine whether additional controls, such as the requirement for full disclosure of all self-insured environmental liabilities over corporate self-insurance, should be implemented and if corporate self-insurance should continue as an option	2017-12-22
	Corrective Action 1-1: *Planned:* 2020-09-30 *Completed:* 0000-00-00 2. Once Recommendation 1 is complete, OLEM, with support from OECA, will use the information to develop appropriate risk management actions to mitigate any identified problems in line with Agency practices for enterprise risk management under OMB Circular A-123, and determine whether additional controls, such as a requirement for full disclosure of all self-insured environmental liabilities in corporate self-insurance demonstrations and/or disallowance of corporate self-insurance, should be pursued at that time. *Status:* Adhering	
	Recommendation 2: RECOMMENDATION 3. Update standard operating procedures and data systems to accommodate the implemented risk management actions.	
	Corrective Action 2-1: *Planned:* 2021-09-30 *Completed:* 0000-00-00 3. OLEM, with support from OECA, will update standard operating procedures and data systems to accommodate the implemented risk management actions. *Status:* Adhering	
	Recommendation 3: RECOMMENDATION 4. Train staff on the implemented risk management actions.	
	Corrective Action 3-1: *Planned:* 2021-12-31 *Completed:* 0000-00-00 4. OLEM, with support from OECA, will train staff on the implemented risk management actions. *Status:* Adhering	
	Recommendation 4: RECOMMENDATION 6. 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 4-1: *Planned:* 2020-06-30 *Completed:* 0000-00-00 6. In the RCRA program, EPA will 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. The RCRA program will develop and include procedures for checking with other regions or states when facilities/sites with multiple self-insured liabilities exist.	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	May 2019 Update: The OLEM Acting AA approved the revision of this milestone date from June 20, 2020 to September 30, 2021 as a result of the delay in launching the RCRAInfo Financial Assurance module upgrade to version 6. New expected date delivery is 09/30/21. Acting OLEM AA, Barry Breen, notified Acting IG Charles Sheehan on Tuesday, May 7, 2019. *Status:* Delayed	
	Recommendation 5: RECOMMENDATION 5. 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 5-1: Planned: 2020-06-30 Completed: 0000-00-00 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. May 2019 Update: The OLEM Acting AA approved the revision of this milestone date from June 20, 2020 to September 30, 2021 as a result of the delay in launching the RCRAInfo Financial Assurance module upgrade to version 6. New expected date delivery is 09/30/21. Acting OLEM AA, Barry Breen, notified Acting IG Charles Sheehan on Tuesday, May 7, 2019. Status: Delayed	
	Recommendation 6: RECOMMENDATION 7. 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 6-1: *Planned:* 2020-06-30 *Completed:* 0000-00-00 7. In the RCRA program, EPA will 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. The RCRA program will develop and include in the guidance and/or SOPs: (1) instructions on the steps to take when an invalid financial assurance instrument (expired, insufficient in dollar amount, or not provided) is identified and (2) where and when to collect and document causes of invalid financial assurance. May 2019 Update: For corrective actions 5, 6 and 7, the OLEM Acting AA approved the revision of this	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	milestone date from June 20, 2020 to September 30, 2021 as a result of the delay in launching the RCRAInfo Financial Assurance module upgrade to version 6. New expected date delivery is 09/30/21. Acting OLEM AA, Barry Breen, notified Acting IG Charles Sheehan on Tuesday, May 7, 2019. *Status:* Adhering	
	Recommendation 7: RECOMMENDATION 8. Train staff on the procedures and instructions developed for Recommendations 5 through 7.	
	Corrective Action 7-1: *Planned:* 2020-09-30 *Completed:* 0000-00-00 8. In the RCRA program, EPA will hold webinar for EPA regions and states, add SOPs to existing training materials, and evaluate financial assurance training needs and develop training plan for recommendations 5 through 7. May 2019 Update: the OLEM Acting AA approved the revision of this milestone date from September 30, 2020 to December 31, 2021 as a result of the delay in launching the RCRAInfo Financial Assurance module upgrade to version 6. New expected date delivery is 12/31/21. Acting OLEM AA, Barry Breen, notified Acting IG Charles Sheehan on Tuesday, May 7, 2019. *Status:* Adhering	
17-P00174-168	Recommendation 1: 1. Provide updated guidance to states and tribes on clear and effective risk communication methods for fish advisories, especially for high-risk groups. This guidance could recommend posting fish advisory information at locations where fish are caught; and using up-to-date communication methods that include social media, webinars, emails, newsletters, etc.	2017-04-12
	Corrective Action 1-1: *Planned:* 2020-03-31 *Completed:* 0000-00-00 Develop a draft updated version of Volume 4: Risk Communication of the Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. Status: Adhering	
	Recommendation 2: 2. Working with states and tribes, develop and disseminate best practices they can use to measure evaluate the effectiveness of fish advisories in providing risk information to subpopulations, such as subsistence fishers, tribes and other high fish-consuming groups.	
	Corrective Action 2-1: *Planned:* 2020-03-30 *Completed:* 0000-00-00 EPA concurs with the end goal of the recommendation – making sure high-risk subpopulations receive information on risks of eating certain fish. EPA understands the benefits of evaluating the effectiveness of fish advisory programs and agrees that working with the states and tribes in that area would benefit the fish advisory programs as well as the fishing population. *Status:* Adhering	
18-P00221-168	Recommendation 1: 2. Include in the revised Lead and Copper Rule the most protective protocols for monitoring and corrosion control.	2018-07-19
	Corrective Action 1-1: *Planned:* 2019-02-28 *Completed:* 0000-00-00 OW concurs with this recommendation regarding the importance of proper implementation of the protocol	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	for monitoring and corrosion control, and we continue to work on the long-term revisions to the existing LCR. Most recently, OW engaged stakeholders as part of a federalism consultation. The Agency is evaluating input we received from our state, local and tribal partners as well as the best available peer-reviewed science to ensure the Rule reflects the best ways to improve public health protection. *Status:* Delayed	
	Recommendation 2: 9. Improve oversight by establishing a clear and credible escalation policy for EPA intervention in states. The policy should provide steps the EPA will take when states do not act.	
	Corrective Action 2-1: *Planned:* 2019-07-31 *Completed:* 0000-00-00 OECA and OW concur with this recommendation. On August 15, 2017, Administrator Pruitt reaffirmed EPA's Policy on Elevation of Critical Environmental and Public Health Issues. The Administrator directed EPA staff to elevate concerns quickly and directed the Regions to inform headquarters of any issues that are elevated under this policy. OECA is providing training on the use of SDWA Section 1431 authority. In implementing the recommendation from the OIG's SDWA Section 1431 Management Alert in October 2016 for 18-P-0221 57 OECA to update the 1991 SDWA Section 1431 guidance, over the past year, OECA worked with several Regions, OW and OGC to develop updates to the guidance. OECA is also conducting trainings on Section 1431 and the updated guidance. OECA is currently considering the possibility of a national initiative to promote improved drinking water compliance. EPA has initiated a workgroup with participation from OECA, OW and the Regions. The workgroup will explore how best to use drinking water data and measures to identify public water systems that present or are likely to present a significant risk to public health. The workgroup will develop procedures and strategies to ensure timely and effective EPA intervention where a state's response to the risk is insufficient to protect the public's health. OECA will seek state input on whether to create a new national initiative to improve drinking water compliance starting in June 2018, and then will seek public comment in November 2018. OECA expects to make a decision after this engagement process by July 2019. *Status:* Delayed	
	Recommendation 3: 1. Establish controls to annually verify that states are monitoring compliance with all Lead and Copper Rule requirements, including accurately identifying tier 1 sampling sites and maintaining continuous corrosion control.	
	Corrective Action 3-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 In December 2018, EPA will hold a meeting with the regional branch chiefs to review and update the protocol used for the FY2018 annual Public Water System program reviews. As part of this review, EPA will amend the Public Water System program review protocol as needed to verify that states are	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	implementing Lead and Copper Rule requirements. The changes made will be implemented in the FY2019 and future annual program reviews. Status: Delayed	
19-P00002-168	Recommendation 1: Issue updated and consistent guidance on biosolids fecal coliform sampling practices.	2018-11-15
	Corrective Action 1-1: Planned: 2020-12-31 Completed: 0000-00-00 Recommendation #8 Status: Adhering	
	Recommendation 2: Publish guidance on the methods for the biosolids pathogen alternatives 3 and 4.	
	Corrective Action 2-1: Planned: 2020-12-31 Completed: 0000-00-00 Recommendation #6 Status: Adhering	
	Recommendation 3: 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 3-1: Planned: 2022-12-31 Completed: 0000-00-00 For Recommendation 4, the 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, the EPA provided acceptable corrective actions and a planned completion date. In addition to the 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. Status: Adhering	
	Recommendation 4: Complete development of the probabilistic risk assessment tool and screening tool for biosolids land application scenarios.	
	Corrective Action 4-1: Planned: 2021-12-31 Completed: 0000-00-00 For Recommendation 3, the agency agreed with 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. Status: Adhering	
19-P00318-168	Recommendation 1: Define for primacy agencies and public water systems acceptable methods and conditions under which the electronic delivery of Tiers 2 and 3 notices meet the Safe Drinking Water Act's direct delivery requirement.	2019-09-25
	Corrective Action 1-1: Planned: 2020-09-30 Completed: 0000-00-00 3.1 The EPA will issue a memorandum that discusses and clarifies the appropriate electronic delivery methods for Tier 2 and Tier 3. 3.2 Following the issuance of the memorandum, the EPA will host a training session for primacy agencies, public water systems and other water sector stakeholders to understand the appropriate mechanisms to utilize for electronic delivery of public notifications. Status: Adhering	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	Recommendation 2: Update the EPA's drinking water program review protocols to include steps for reviewing Tier 3 notices and for citing primacy agencies that do not retain complete public notice documentation.	
	Corrective Action 2-1: Planned: 2021-01-31 Completed: 0000-00-00 4.1 The EPA will update the review protocol to address PN record keeping requirements in the summary report. 4.2 The Agency recommends using the SDWA PWSS Annual Program Review as the most effective tool for reviewing Tier 3 PN implementation. After discussion between the OIG and the EPA, the OIG agreed with the EPA recommendation, and intends to update the report to reflect this. The EPA will update the PWSS program review protocol to include review for Tier 3 PN for the next two consecutive fiscal years. Status: Complete	
	Recommendation 3: 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 than English.	
	Corrective Action 3-1: *Planned:* 2020-09-30 *Completed:* 0000-00-00 6. I The EPA will revise the Public Notification Handbook per OJG"s *Status:* Adhering	
	Recommendation 4: 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 4-1: Planned: 2020-06-30 Completed: 0000-00-00 5.1 The EPA will revise the State Implementation Guidance per OIG"s recommendation. Status: Adhering	
	Recommendation 5: Implement a strategy and internal controls to improve the consistency of public notice violation data available in the EPA's new national drinking water database, including the review and update of open public notice violations prior to migrating the data to the new database.	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	Corrective Action 5-1: *Planned:* 2020-09-30 *Completed:* 0000-00-00 9.1 The EPA will identify appropriate methods for primacy agencies to resolve outstanding PN violations. OECA and OW will jointly issue a new memo similar to the 2011 memo "Guidance for SDWA Primacy Agencies on How to Enter Resolving Action Codes into SDWIS for Past Public Notice Violations and Clarification on How to Address Public Notification Violations in Certain Circumstances." 9.2 Following the issuance of the memorandum, the OECA and OW will provide training for regional and primacy agency staff. Status: Adhering	
	Recommendation 6: Conduct a national review of the adequacy of primacy agency implementation, compliance monitoring, reporting and enforcement of the Safe Drinking Water Act's public notice requirements.	
	Corrective Action 6-1: Planned: 2020-12-31 Completed: 0000-00-00 7.1 The EPA's OECA and OW will conduct a national review of the adequacy of primacy agency implementation, compliance monitoring, reporting, and enforcement of the SDWA PN requirements. 7.2 OECA will pilot test a new framework for regional review of primacy agency response to violations, including whether public notice requirements are met. Upon completion of the pilot, OECA will review the results and, if the approach is effective, will finalize the framework and implement a national program for periodic regional reviews of primacy agencies. Status: Adhering	
17-P00412-180	Recommendation 1: We recommend that the Assistant Administrator for Enforcement and Compliance Assurance: 1. Establish national compliance monitoring goals based on assessment and consideration of available regional resources.	2017-09-28
	Corrective Action 1-1: Planned: 2019-09-30 Completed: 0000-00-00 September 2019 -OECA continues to draft the responsive document and additional reviews must be completed. The time expected to complete reviews and revisions, requires an extension. Assessment and consideration of available regional resources for inspections are already conducted and is represented by Annual Commitment System. (For non-inspection import related compliance assurance activities, identify opportunities for strengthening internal controls, establishing goals, communicating progress of regional accomplishments). Status: Delayed	
	Recommendation 2: We recommend that the Assistant Administrator for Enforcement and Compliance Assurance: 2. Implement internal controls to monitor and communicate progress on regional goals.	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	Corrective Action 2-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 September 2019 -OECA continues to draft the responsive document and additional reviews must be completed. The time expected to complete reviews and revisions, requires an extension. Assessment and consideration of available regional resources for inspections are already conducted and is represented by Annual Commitment System. (For non-inspection import related compliance assurance activities, identify opportunities for strengthening internal controls, establishing goals, communicating progress of regional accomplishments). *Status:* Delayed	
18-P00059-180	Recommendation 1: Once the study in Recommendation 1 is complete, implement the selected measure (1a or 1b).	2017-12-22
	Corrective Action 1-1: *Planned:* 2020-09-30 *Completed:* 0000-00-00 2) Once recommendation 1 is complete, OLEM with support from OECA, will use the information to develop appropriate risk management actions to mitigate any identified problems in line with Agency practices for enterprise risk management under OMB Circular A-123, and determine whether additional controls, such as a requirement for full disclosure of all self-insured environmental liabilities in corporate self-insurance demonstrations and/or disallowance of corporate self-insurance, should be pursued at that time. *Status:* Adhering	
	Recommendation 2: Update standard operating procedures and data systems to accommodate the changes implemented for Recommendation 2	
	Corrective Action 2-1: Planned: 2021-09-30 Completed: 0000-00-00 3) OLEM, w/support from OECA, will update SOPs and data systems to accommodate the implemented risk management actions. Status: Adhering	
	Recommendation 3: Train staff on the changes implemented for Recommendation 2.	
	Corrective Action 3-1: Planned: 2021-12-31 Completed: 0000-00-00 4) OLEM, w/support from OECA will train staff on the implemented risk management actions Status: Adhering	
18-P00079-180	Recommendation 1: 1. Develop and implement additional Federal Insecticide, Fungicide, and Rodenticide Act guidance to assist Project Officers in evaluating whether funding is reasonable given projected work plan tasks.	2018-02-13
	Corrective Action 1-1: *Planned:* 2019-11-30 *Completed:* 0000-00-00 November 2019 - OECA/OC requires additional time to complete the PO guidance. To date, interviews have been conducted w/PO and the draft guidance has been prepared. However, the draft requires review by OECA mgmt and the regional personnel, prior to implementation. Additional time is needed to complete	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	these tasks. Develop additional FIFRA guidance to assist POs in evaluating whether funding is reasonable given projected work plan tasks. *Status:* Delayed	
18-P00221-180	Recommendation 1: 1. Establish controls to annually verify that states are monitoring compliance with all Lead and Copper Rule requirements, including accurately identifying tier 1 sampling sites and maintaining continuous corrosion control.	2018-07-19
	Corrective Action 1-1: *Planned:* 2019-09-30 *Completed:* 0000-00-00 October 2019: OECA notified OW and OCFO this corrective action is led by OW and OECA will not update the activity for this action. Note supported by OW email 2/11/19) February 2019 - OW confirmed OW meet with regional branch chiefs. Corrective action expected to be completed by 9/30/19, as provided by OW email (S. Moore on 2/11/19). In December 2018, EPA will hold a meeting with the regional branch chiefs to review and update the protocol used for the FY 2018 annual Public Water System Supervision program reviews. As part of this review, EPA will amend the Public Water System program review protocol as needed to verify that states are implementing Lead and Copper Rule requirements. The changes will be implemented in FY 2019 and the future annual program reviews. *Status:* Delayed	
19-P00001-180	Recommendation 1: Enforce compliance by the investigators to submit, and the supervisors to approve, the monthly activity reports supporting Law Enforcement Availability Pay within the required timeframes in the Monthly Activity Reporting System Purpose, Requirements and Procedures Manual.	2018-11-06
	Corrective Action 1-1: *Planned:* 2019-10-01 *Completed:* 0000-00-00 October 2019: OECA/OCEFT continues to complete the new Case Reporting System, which includes a revised MARS, this system will be called OCEAN. OECA continues to work on some remaining issues before OCEAN goes live. At that time, MARS will be completed in OCEAN and will contain a new automated approval and routing process. Supervisors will also be trained on the new process. Train supervisors on updated process. *Status:* Delayed	
	Recommendation 2: Implement controls to improve timeliness of the annual certification process for Law Enforcement Availability Pay.	
	Corrective Action 2-1: Planned: 2019-10-01 Completed: 0000-00-00 October 2019: OECA/OCEFT continues to complete the new Case Reporting System, which includes a revised MARS, this system will be called OCEAN. OECA continues to work on some remaining issues before OCEAN goes live. At that time, MARS will be completed in OCEAN and will contain a new automated approval and routing process. Supervisors will also be trained on the new process. Revise MARS reporting to automate approval and routing of electronic certification. Status: Delayed	

FY Audit Number	Recommendations and Corrective Actions	Report Date
19-P00251-180	Recommendation 1: Develop and implement a plan for improving the consistency of stack test reviews across EPA regions and delegated agencies.	2019-07-30
	Corrective Action 1-1: Planned: 2019-12-31 Completed: 0000-00-00 1a -OECA will develop a plan 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. Status: Delayed	
	Recommendation 2: Develop and implement a plan for improving the consistency of stack test reviews across EPA regions and delegated agencies.	
	Corrective Action 2-1: Planned: 2022-03-31 Completed: 0000-00-00 1b. 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. Status: Adhering	
19-P00318-180	Recommendation 1: Conduct a national review of the adequacy of primacy agency implementation, compliance monitoring, reporting and enforcement of the Safe Drinking Water Act's public notice requirements.	2019-09-25
	Corrective Action 1-1: Planned: 2020-09-30 Completed: 0000-00-00 7.1 The EPA"s OECA and OW will conduct a national review of the adequacy of primacy agency implementation, compliance monitoring, reporting and enforcement of the SDWA PN requirements. Status: Adhering	
	Recommendation 2: Conduct a national review of the adequacy of primacy agency implementation, compliance monitoring, reporting and enforcement of the Safe Drinking Water Act's public notice requirements.	
	Corrective Action 2-1: Planned: 2020-12-31 Completed: 0000-00-00 7.2 OECA will pilot test a new framework for regional review of primacy agency response to violations, including whether public notice requirements are met. Upon completion of the pilot, OECA will review the results and, if the approach is effective, will finalize the framework and implement a national program for periodic regional reviews for primacy agencies. Status: Adhering	
	Recommendation 3: Implement a strategy and internal controls to improve the consistency of public notice violation data available in the EPA's new national drinking water database, including the review and update of open public notice violations prior to migrating the data to the new database.	
	Corrective Action 3-1: *Planned:* 2020-06-30 *Completed:* 0000-00-00 9.1 The EPA will identify appropriate methods for primacy agencies to resolve outstanding PN violations.	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	OECA and OW will jointly issue a new memo similar to the 2011 memo, "Guidance for SDWA Primacy Agencies on How to Enter Resolving Action Codes into SDWIS for Past Public Notice Violations and Clarification on How to Address Public Notification Violations in Certain Circumstances." *Status:* Adhering	
	Recommendation 4: Implement a strategy and internal controls to improve the consistency of public notice violation data available in the EPA's new national drinking water database, including the review and update of open public notice violations prior to migrating the data to the new database.	
	Corrective Action 4-1: Planned: 2020-09-30 Completed: 0000-00-00 9.2 Following the issuance of the memo, the OECA and OW will provide training for regional and primacy agency staff. Status: Adhering	
20-P00012-180	Recommendation 1: 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.	2019-10-29
	Corrective Action 1-1: *Planned:* 2020-12-31 *Completed:* 0000-00-00 OECA agrees to develop INTERIM 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. *Status:* Adhering Corrective Action 1-2: Planned: 2022-12-31 Completed: 0000-00-00 OECA agrees to develop FINAL 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. Status: Adhering	
	Recommendation 2: Develop and implement tribal circuit rider guidance for pesticide inspectors that includes expectation-setting and communication with tribes that are being served under a tribal pesticide enforcement cooperative agreement.	
	Corrective Action 2-1: Planned: 2020-12-31 Completed: 0000-00-00 OECA agrees to develop INTERIM guidance for pesticide inspectors that includes expectation-setting and communication with circuit tribes that are being served under a tribal pesticide enforcement cooperative agreement. Status: Adhering Corrective Action 2-2: Planned: 2022-12-31 Completed: 0000-00-00	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	OECA agrees to develop FINAL guidance for pesticide inspectors that includes expectation-setting and communication with circuit tribes that are being served under a tribal pesticide enforcement cooperative agreement. Status: Adhering	
	Recommendation 3: Develop and implement regional processes to receive feedback directly from tribes using pesticide circuit riders.	
	Corrective Action 3-1: Planned: 2020-12-31 Completed: 0000-00-00 OECA agrees to develop Interim regional processes to receive feedback directly from tribes using pesticide circuit riders. Status: Adhering Corrective Action 3-2: Planned: 2022-12-31 Completed: 0000-00-00 OECA agrees to develop FINAL regional processes to receive feedback directly from tribes using pesticide circuit riders. Status: Adhering	
15-P00137-320	Recommendation 1: Develop a plan to address currently uncompleted tasks and activities, and develop a schedule for reprogramming grant funds to accomplish these tasks if USVI does not or cannot complete them. Upon completion of the financial management corrective actions, follow the Office of the Chief Financial Officer's Resource Management Directive System 2520-03 to determine whether any of the current unspent funds of approximately $37 million under the USVI assistance agreements could be put to better use.	2015-04-17
	Corrective Action 1-1: Planned: 2018-09-30 Completed: 0000-00-00 The financial issues raised above have created severe restrictions on cash flow within VIDPNR, which has curtailed hiring and procurement and, therefore, impacted its ability to implement delegated environmental programs. Understaffing has led to delays in VIDPNR fulfilling outstanding work plan commitments. While Region 2 has historically monitored DPNR's completion of these commitments, and continues to do so, we recognize that the cash flow shortage has had a negative effect on the number of commitments completed. The corrective actions we have outlined will produce increased cash flow to VIDPNR particularly after we issue a "Declaration of Significant Progress." As the schedule indicates, full unrestricted advance access to EPA funds is estimated for the end of FY 2018. Region 2's strategy is to develop a programmatic corrective action plan after the financial situation improves in DPNR and it has sufficient funds available to fully implement its environmental programs. In the interim, we will continue to monitor its performance with respect to major commitments and address significant issues. Once DPNR has sufficient funds, we will assess its program performance, identify deficiencies and develop appropriate corrective actions.	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	Update 9/30/2015: During September 2015 Region 2 disbursed approximately $5 million of grant funds to DPNR based on proper reporting of accounting adjustments. VI has successfully obtained EPA approval of its methodology for properly distributing/allocating non-working hour costs and shared services costs among federal grants, has implemented enhancements to the government-wide accounting system, has submitted reimbursement request packages in anticipation of requesting EPA relaxation of payment limitations under its grants in light of the recent significant progress it has achieved, and is working on finalizing updates to its SOP manual for submittal to EPA as part of its request. We anticipate performing an onsite review sometime in the Fall of FY 2019 to verify and confirm that VIDPNR has fully implemented the required corrective actions, with issuance of a report sometime in the Winter of FY 2019. Update 9/27/2018: VI has successfully obtained EPA approval of its methodology for properly distributing/allocating non-working hour costs and shared services costs among federal grants, has implemented enhancements to the government-wide accounting system, has submitted reimbursement request packages in anticipation of requesting EPA relaxation of payment limitations under its grants in light of the recent significant progress it has achieved, and is working on finalizing updates to its SOP manual for submittal to EPA as part of its request. Region 2 anticipates performing an onsite review sometime in the Fall of FY 2019 to verify and confirm that VIDPNR has fully implemented the required corrective actions, with issuance of a report sometime in the Winter of FY 2019. Update 3/27/2019: In December 2018 Region 2 issued notice to VI Dept. of Planning and Natural Resources (VIDPNR) that it had achieved "substantial progress" on corrective actions for improvement of management of EPA assistance agreements. This has allowed DPNR to catch up with assistance agreement drawdowns, eliminating substantial unliquidated obligations. Region 2 plans a final step in consideration of lifting VIDPNR's "High-Risk" designation status, that being an on-site visit in late 3rd/early 4th quarter FY 2019. Upon successful completion of the on-site review to confirm that remaining corrective actions have been implemented, Region 2 will initiate formal removal of VIDPNR from "High-Risk" status. The new estimated completion date is September 30, 2019. Update 9/30/2019: In December 2018, Region 2 issued notice to VI Department of Planning and Natural Resources (VIDPNR) that it had achieved “substantial progress” on corrective actions for improving the management of EPA assistance agreements. This has allowed VIDPNR to catch up with assistance agreement drawdowns, eliminating a substantial amount of unliquidated obligations. Region 2 plans a final step in consideration of lifting VIDPNR’s “High-Risk” designation status, that being an on-site visit in 1st Quarter FY 2020 and a contingency date in early 2nd Quarter FY 2020. Upon successful completion of the	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	on-site visit to confirm that remaining corrective actions have been implemented, Region 2 will initiate formal removal of VIDPNR from "High-Risk" status. The new estimated completion date is March 31, 2020. *Status:* Delayed	
20-P00001-340	Recommendation 1: 1. Direct the Water Division to finalize its standard operating procedure for disaster response.	2019-10-07
	Corrective Action 1-1: *Planned:* 2020-03-20 *Completed:* 0000-00-00 Corrective action for Recommendation 1—finalizing a standard operating procedure for disaster response—is pending. *Status:* Adhering	
13-R00297-360	Recommendation 1: Recover federal funds of $2,904,578 unless the foundation provides a verifiable and enforceable remedy to reduce diesel emissions in the Baton Rouge ozone nonattainment area, as required by the cooperative agreement.	2013-06-20
	Corrective Action 1-1: *Planned:* 2020-09-30 *Completed:* 0000-00-00 Two of the five rebuilt locomotives will continue to operate in the Baton Rouge nonattainment area. 2014 Status of RRF 1st and 2nd Quarterly Reports per Gloria Vaughn on September 22, 2014: Table and pie charts in 1st and 2nd qtr. 2014 reports show two locomotives continuing to operate in the Baton Rouge non-attainment area. Status of RRF Quarterly Reporting for the Period July 1 through September 30, and October 1 through December 31, 2014 as of 1/15/2015: Table and pie charts in 3rd and 4th qtr. 2014 reports show two locomotives continuing to operate in the Baton Rouge non-attainment area. 2015 Status of RRF Quarterly Reporting for the Period January 1 through March 31, 2015 as of 4/15/15: Table and pie charts in 1st Qtr 2015 report show two locomotives continuing to operate in the Baton Rouge non-attainment area. Status of RRF 2nd Quarterly Reporting for the Period April 1 through June 30, 2015 as of 7/20/15: Table and pie charts in 2nd qtr. 2015 report show location of all of the locomotives. Status of RRF 3rd Quarterly Reports for July 1 - September 30, 20915 per Gloria Vaughn on November 17, 2015: Table and pie charts in 3rd qtr. 2015 reports show two locomotives continuing to operate in the Baton Rouge non-attainment area.	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	Status of RRF 4th Quarterly Reports (October 1 - December 31, 2015) per Gloria Vaughn on January 29, 2016: Table and pie charts in 4th qtr. 2015 reports show two locomotives continuing to operate in the Baton Rouge non-attainment area. Status of RRF Quarterly Reports per Gloria Vaughn on June 14, 2016: Table and pie charts in 1st qtr. 2016 report show two locomotives continuing to operate in the Baton Rouge non-attainment area. Status of RRF Quarterly Reports per Gloria Vaughn on August 2, 2016: Table and pie charts in 2nd qtr. 2016 report show two locomotives continuing to operate in the Baton Rouge non-attainment area. Status of RRF Quarterly Reports per Gloria Vaughn on November 15, 2016: Table and pie charts in 3rd quarter 2016 report show two locomotives continuing to operate in the Baton Rouge non-attainment area. Status of RRF Quarterly Reports per William Rhea on March 2, 2017: Table and pie charts in 4th quarter 2016 report show two locomotives continuing to operate in the Baton Rouge non-attainment area. Status of RRF Quarterly Reports per William Rhea on April 20, 2017: Table and pie charts in 1st quarter 2017 report show two locomotives continuing to operate in the Baton Rouge non-attainment area. Status of RRF Quarterly Reports per William Rhea on July 18, 2017: Table and pie charts in 2nd quarter 2017 report show two locomotives continuing to operate in the Baton Rouge non-attainment area. Status of RRF Quarterly Reports per William Rhea on October 18, 2017: Table and pie charts in 3rd quarter 2017 report show two locomotives continuing to operate in the Baton Rouge non-attainment area. Status of RRF Quarterly Reports for October 1, 2017 through December 31, 2017 dated January 15, 2018 per William Rhea on February 5, 2018: Table and pie charts in 4th qtr. 2017 reports show two locomotives continuing to operate in the Baton Rouge non-attainment area *Status:* Adhering	
	Corrective Action 1-2: *Planned:* 2020-09-30 *Completed:* 0000-00-00 The remaining three rebuilt locomotives will continue to operate between Baton Rouge and New Orleans until economic conditions in Baton Rouge necessitate moving as many locomotives as possible back to the Baton Rouge non-attainment area.	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	2014 Status of RRF 1st and 2nd Quarterly Reports, per Gloria Vaughn on September 22, 2014: Table and pie charts in 1st and 2nd qtr. 2014 reports show three locomotives operating in the exception area. Status of 3rd and 4th Quarters for the Period July 1 through September 30, and October 1 through December 31, 2014 as of 1/15/2015: Table and pie charts in 3rd and 4th qtr. 2014 reports show three locomotives operating in the exception area. 2015 Status of RRF Quarterly Reporting for the Period January 1 through March 31, 2015 (as of 4/15/15: Table and pie charts 1st qtr. 2015 report show three locomotives operating in the exception area. Status of RRF 2nd Quarterly Reporting for the Period April 1 through June 30, 2015 as of 7/20/15: Table and pie charts in 2nd qtr. 2015 report show three locomotives operating in the exception area. Status of RRF 3rd Quarterly Report (July 1 through September 30, 2015) as of November 17, 2015: Table and pie charts in 3rd qtr. 2015 report show three locomotives operating in the exception area. Status of RRF 4th Quarterly Report (October 1 through December 31, 2015) as of January 29, 2016: Table and pie charts in 4th qtr. 2015 reports show three locomotives operating in the exception area. Status of RRF January 1 through March 31, 2016 report. Table and pie charts in 1st qtr. 2016 reports show three locomotives operating in the exception area. Status of RRF April 1 through June 30, 2016 report. Table and pie charts in 2nd qtr. 2016 reports show three locomotives operating in the exception area. Status of RRF July 1 through September 30, 2016 report. Table and pie charts in 3rd quarter 2016 reports show three locomotives operating in the exception area. Status of RRF October 1 through December 31, 2016 report. Table and pie charts in 4th quarter 2016 reports show three locomotives operating in the exception area. Status of RRF January 1 through March 31, 2017 report. Table and pie charts in 1st quarter 2017 reports	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	show three locomotives operating in the exception area. Status of RRF April 1 through June 30, 2017 report. Table and pie charts in 2nd quarter 2017 reports show three locomotives operating in the exception area. Status of RRF July 1 through September 30, 2017 report. Table and pie charts in 3rd quarter 2017 reports show three locomotives operating in the exception area. Status of RRF October 1 through December 31, 2017 report. Table and pie charts in 4th qtr. 2017 reports show three locomotives operating in the exception area *Status:* Adhering	
	Corrective Action 1-3: *Planned:* 2020-09-30 *Completed:* 0000-00-00 RRF will provide locomotive location data to EPA on a quarterly basis showing where the five locomotives were operated. 2014 Status of RRF 1st and 2nd Quarterly Reports per Gloria Vaughn on September 22, 2014: Table and pie charts in 1st and 2nd qtr. 2014 reports show location of all of the locomotives. Item 6 of the Amendment requires that the supporting source documentation for the regular reports be maintained and available until the final audit resolution in 2020. We did not receive the usage logs but they should be available to us if requested. Status of 3rd and 4th 2014 Quarterly Reporting for the Period July 1 through September 30, and October 1 through December 31, 2014 as of 1/15/2015: Table and pie charts in 3rd and 4th qtr. 2014 reports show location of all of the locomotives. 2015 Status of RRF Quarterly Reporting for the Period January 1 through March 31, 2015 as of 4/15/15: Table and pie charts in 1st qtr. 2015 report shows location of all of the locomotives. Status of RRF Quarterly Reporting for the Period April 1 through June 30, 2015 as of 7/20/15: Table and pie charts in 2nd qtr. 2015 report shows location of all of the locomotives. Status of RRF Quarterly Reporting for the Period July 1 through September 30, 2015 as of 11/17/15: Table and pie charts in 3rd qtr. 2015 report shows location of all of the locomotives.	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	Status of RRF 4th Quarterly Reporting for the Period October 1 through December 31, 2015 as of 1/29/16: Table and pie charts in 4th qtr. 2015 reports shows location of all of the locomotives. Status of RRF Quarterly Reporting for the Period January 1 through March 31, 2016 as of 6/14/16: Table and pie charts in 1st qtr. 2016 reports shows location of all of the locomotives. Status of RRF Quarterly Reporting for the Period April 1 through June 30, 2016 as of 8/2/16: Table and pie charts in 2nd quarter 2016 reports shows location of all of the locomotives. Status of RRF Quarterly Reporting for the Period July 1 through September 30, 2016 as of 11/15/16: Table and pie charts in 3rd quarter 2016 reports shows location of all of the locomotives. Status of RRF Quarterly Reporting for the Period October 1 through December 31, 2016 as of 01/19/17: Table and pie charts in 4th quarter 2016 reports shows location of the 5 locomotives, 2 in Baton Rouge and 3 in excepted area. Status of RRF Quarterly Reporting for the Period January 1 through March 31, 2017 as of 04/20/17: Table and pie chart in 1st quarter 2017 reports show location of the 5 locomotives, 2 in Baton Rouge and 3 in excepted area. Status of RRF Quarterly Reporting for the Period April 1 through June 30, 2017 as of 07/18/17: Table and pie chart in 2nd quarter 2017 reports show location of the 5 locomotives, 2 in Baton Rouge and 3 in excepted area. Status of RRF Quarterly Reporting for the Period July 1 through September 30, 2017 as of 10/18/17: Table and pie chart in 3rd quarter 2017 reports show location of the 5 locomotives, 2 in Baton Rouge and 3 in excepted area. Status of RRF Quarterly Reporting for the Period October 1, 2017 through December 31, 2017 as of 1/15/18: Table and pie charts in 4th qtr. 2017 reports show location of the 5 locomotives, 2 in Baton Rouge and 3 in excepted area. *Status:* Adhering	
	Corrective Action 1-4: *Planned:* 2020-09-30 *Completed:* 0000-00-00 As a penalty for noncompliance, RRF will remit to the U.S. EPA $4,841 for each locomotives for each	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	month any of the five locomotives are operated outside of the restricted area for more than 10 plus consecutive days, outside the Baton Rouge non-attainment area and the Exception area (for other than maintenance). 2014 Status of RRF 1st and 2nd Quarterly Reports per Gloria Vaughn on September 22, 2014: Table and pie charts in 1st and 2nd qtr. 2014 reports show location of all of the locomotives. None have been stationed more than 10 plus days outside of the Exception area. Status of RRF 3rd and 4th Quarterly Reporting for the Period July 1, 2014 through September 30, 2014 and October 1, 2014 through December 31, 2014 as of 1/15/2015: Table and pie charts in 3rd and 4th qtr. 2014 reports show location of all of the locomotives. None have been stationed more than 10 plus days outside of the Exception area. 2015 Status of RRF Quarterly Reporting for the Period January 1, 2015 through March 31, 2015 as of 4/15/15: Table and pie charts 1st qtr. 2015 report show location of all of the locomotives. None have been stationed more than 10 plus days outside of the Exception area. Status of RRF Quarterly Reporting for the Period April 1, 2015 through June 30, 2015 as of 7/20/15: Table and pie charts in 2nd qtr. 2015 report show location of all of the locomotives. None have been stationed more than 10 plus days outside of the Exception area. Status of RRF 3rd Quarterly Reporting for the Period July 1 through September 30, 2015 as of 11/17/16: Table and pie charts 3rd qtr. 2015 report shows location of all of the locomotives. None have been stationed more than 10 plus days outside of the Exception area. Status of RRF 4th Quarterly Reporting for the Period October 1 through December 31, 2015 as of 1/29/16: Table and pie charts in 4th qtr. 2015 report show location of all of the locomotives. None have been stationed more than 10 plus days outside of the Exception area. Status of RRF Quarterly Reporting for the Period January 1 through March 31, 2016 as of 6/14/16: Table and pie charts in 1st qtr. 2016 report show location of all of the locomotives. None have been stationed more than 10 plus days outside of the Exception area.	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	Status of RRF Quarterly Reporting for the Period April 1 through June 30, 2016 as of 8/2/16: Table and pie charts in 2nd qtr. 2016 report shows location of all of the locomotives. None have been stationed more than 10 plus days outside of the Exception area. Status of RRF Quarterly Reporting for the Period July 1 through September 30, 2016 as of 11/15/16: Table and pie charts in 3rd quarter 2016 report shows location of all of the locomotives. None have been stationed more than 10 plus days outside of the Exception area. Status of RRF Quarterly Reporting for the Period October 1 through December 31, 2016 as of 01/19/17: Table and pie charts 4th quarter 2016 report show location of all of the locomotives. None have been stationed more than 10 plus days outside of the Exception area unless they were in maintenance. Status of RRF Quarterly Reporting for the Period January 1 through March 31, 2017 as of 04/20/17: Table and pie charts 1st quarter 2017 report show location of all of the locomotives. None have been stationed more than 10 plus days outside of the Exception area unless they were in maintenance. Status of RRF Quarterly Reporting for the Period April 1 through June 30, 2017 as of 07/18/17: Table and pie charts 2nd quarter 2017 report show location of all of the locomotives. None have been stationed more than 10 plus days outside of the Exception area unless they were in maintenance. Status of RRF Quarterly Reporting for the Period July 1 through September 30, 2017 as of 10/18/17: Table and pie charts 3rd quarter 2017 report show location of all of the locomotives. None have been stationed more than 10 plus days outside of the Exception area unless they were in maintenance. Status of RRF Quarterly Reporting for the Period October 1, 2017 through December 31, 2017 as of 1/15/18: Table and pie charts 4th quarter 2017 report show location of all of the locomotives. None have been stationed more than 10 plus days outside of the Exception area unless they were in maintenance. *Status:* Adhering	
	Corrective Action 1-5: *Planned:* 2020-09-30 *Completed:* 0000-00-00 Each of the five locomotives will operate in Baton Rouge area or the Exception area for 10 years after the date each engine was placed back into service. 2014	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	Status of RRF 1st and 2nd Quarterly Reports per Gloria Vaugh on September 22, 2014: Table and pie charts in 1st and 2nd qtr. 2014 reports show that all five of the locomotives are operating in the Baton Rouge area or the exception area. Status of RRF 3rd and 4th Quarterly Reporting for the Period July 1 through September 30, 2014 and October 1 through December 31, 2014 as of 1/15/2015: Table and pie charts in 3rd and 4th qtr. 2014 reports show that all five of the locomotives are operating in the Baton Rouge area or the exception area. 2015 Status of RRF Quarterly Reporting for the Period January 1 through March 31, 2015 as of 4/15/15: Table and pie charts in 1st qtr. 2015 report shows that all five of the locomotives are operating in the Baton Rouge area or the exception area. Status of RRF 2nd Quarterly Reporting for the Period April 1 through June 30, 2015 as of 7/20/15: Table and pie charts in 2nd qtr. 2015 report shows that all five of the locomotives are operating in the Baton Rouge area or the exception area. Table and pie charts in 3rd qtr. 2015 (July 1 - September 30) as of November 17, 2015 reports show that all five of the locomotives are operating in the Baton Rouge area or the exception area. Table and pie charts in 4th qtr. 2015 report as of January 29, 2016 shows that all five of the locomotives are operating in the Baton Rouge area or the exception area. Table and pie charts in 1st qtr. 2016 report shows that all five of the locomotives are operating in the Baton Rouge area or the exception area. Table and pie charts in 2nd quarter 2016 report shows that all five of the locomotives are operating in the Baton Rouge area or the exception area. Table and pie charts in 3rd quarter 2016 report shows that all five of the locomotives are operating in the Baton Rouge area or the exception area. Table and pie charts in 4th quarter 2016 reports show that all five of the locomotives are operating in the Baton Rouge area or the exception area.	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	Table and pie charts in 1st quarter 2017 reports show that all five of the locomotives are operating in the Baton Rouge area or the exception area. Table and pie charts in 2nd quarter 2017 reports show that all five of the locomotives are operating in the Baton Rouge area or the exception area. Table and pie charts in 3rd quarter 2017 reports show that all five of the locomotives are operating in the Baton Rouge area or the exception area. Table and pie charts in 4th quarter 2017 reports show that all five of the locomotives are operating in the Baton Rouge area or the exception area. *Status:* Adhering	
14-P00109-360	Recommendation 1: Direct COs to require that the contractor adjust all its billings to reflect the application of the correct rate to team subcontract ODCs.	2014-02-04
	Corrective Action 1-1: *Planned:* 2024-09-30 *Completed:* 0000-00-00 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). *Status:* Adhering	
18-P00233-360	Recommendation 1: We recommend that the EPA Regional Administrators, Regions 6 and 9: 1. Complete the necessary removal site evaluations and engineering evaluations/cost analyses.	2018-08-22
	Corrective Action 1-1: Planned: 2020-12-31 Completed: 0000-00-00 1.2 Complete engineering evaluations/cost analyses. Status: Adhering	
	Recommendation 2: We recommend that the EPA Regional Administrators, Regions 6 and 9: 2. Fully develop and implement prioritization and resource allocation methodologies for the Tronox abandoned uranium mine sites on or near Navajo Nation lands.	
	Corrective Action 2-1: Planned: 2020-12-31 Completed: 0000-00-00 1.2 Refine prioritization methodology Status: Adhering Corrective Action 2-2: Planned: 2020-12-31 Completed: 0000-00-00	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	1.3 Conduct mine cleanup prioritization. Status: Adhering Corrective Action 2-3: Planned: 2021-12-31 Completed: 0000-00-00 1.4 Complete development and implementation of resource allocation methodology following the cost analysis of the preferred remedies. Status: Adhering	
19-P00236-360	Recommendation 1: Include environmental justice outreach in planning and pre-landfall preparation exercises by gathering data to determine the population, unique needs and challenges of vulnerable communities.	2019-07-16
	Corrective Action 1-1: Planned: 2020-09-30 Completed: 0000-00-00 1.2 The Region 6 Emergency Management Branch will use the list of vulnerable communities to identify ones which are within jurisdictions where it will conduct planning and pre-landfall preparation exercises and ensure these communities are considered during these events. Status: Adhering	
	Recommendation 2: Revise the Region 6 pre-landfall hurricane plan to incorporate steps based on the results of outreach conducted during the planning and pre-landfall preparation exercises.	
	Corrective Action 2-1: Planned: 2021-03-31 Completed: 0000-00-00 The Emergency Management Branch will revise pre-landfall hurricane plans based on the results of the planning and pre-landfall activities conducted as part of Recommendation 1. Status: Adhering	
	Recommendation 3: Implement the recommendations to improve environmental justice outreach identified at the June 2018 environmental justice forum.	
	Corrective Action 3-1: Planned: 0000-00-00 Completed: 0000-00-00 3.1 During an event, (OCTEA) will hold regular calls with affected vulnerable communities to identify concerns and issues. These concerns and issues will be provided to Incident Command for evaluation and action as needed. Corrective Action 3-2: Planned: 2020-03-31 Completed: 0000-00-00 3.2 The Emergency Management Branch will add the topic of environmental justice to training for Incident Management Teams and Response Support Corps personnel. Status: Adhering Corrective Action 3-3: Planned: 0000-00-00 Completed: 0000-00-00 3.4 This is covered in the response to Recommendation 4. Status: Adhering	
	Recommendation 4: Prepare and produce all outreach materials—including the cleanup literature identified in the June 2018 environmental justice forum—in advance, in sufficient quantities and in the region's prevalent languages, and post all translated materials online.	
	Corrective Action 4-1: Planned: 2020-03-31 Completed: 0000-00-00	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	4.2 The Region 6 Office of External Affairs will have documents translated, ensure there is a link to each document on the EPA webpage, and establish a process to make printed copies available when needed. Status: Adhering	
12-100560-380	Recommendation 1: Ensure the grantee addresses the recommendations and recover questioned and unsupported costs	2007-09-24
	Corrective Action 1-1: *Planned:* 0000-00-00 *Completed:* 0000-00-00 3/20/15: OGD and the Region are discussing contents of proposed Final Determination Letter and need for a waiver request. Projected completion date is June 30, 2015. 12/30/13: The Region is continuing to work with HQ and regional counsel on options for this recipient with a revised expected completion date of June 30,2014. The Region will also be looking to the new OMB Circular on cooperative audit resolution for some guidance. 10/21/13: OGD and the Region are discussing contents of proposed Final Determination Letter. Projected completion date is December 30, 2013. *Status:* Delayed	
18-P00233-390	Recommendation 1: We recommend that the EPA Regional Administrators, Regions 6 and 9: 1. Complete the necessary removal site evaluations and engineering evaluations/cost analyses.	2018-08-22
	Corrective Action 1-1: Planned: 2020-12-31 Completed: 0000-00-00 1.1.2 Complete engineering evaluations/cost analyses-12/31/2020 Status: Adhering	
	Recommendation 2: We recommend that the EPA Regional Administrators, Regions 6 and 9: 2. Fully develop and implement prioritization and resource allocation methodologies for the Tronox abandoned uranium mine sites on or near Navajo Nation lands.	
	Corrective Action 2-1: Planned: 2021-12-31 Completed: 0000-00-00 2.1.4 Complete development and implementation of resource allocation methodology following the cost analysis of the preferred remedies-12/31/2021 Status: Adhering Corrective Action 2-2: Planned: 2020-12-31 Completed: 0000-00-00 2.1.2 Refine prioritization methodology-12/31/2020 Status: Adhering Corrective Action 2-3: Planned: 2020-12-20 Completed: 0000-00-00 1.3 Conduct mine cleanup prioritization-12/31/2020 Status: Adhering	
19-S00182-390	Recommendation 1: We recommend that the Action Official confirm the corrective action the recipient identified in the single audit report was implemented. If the corrective action has not been implemented, EPA needs to obtain a corrective action plan, with milestone dates, for addressing the findings in the report.	2019-06-13
	Corrective Action 1-1: Planned: 2020-01-31 Completed: 0000-00-00	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	During the fiscal year 2017 audit, it was determined that several of the grant program funds had old receivable amounts due from federal and state governments that were overstated and uncollectable. Therefore, adjustments were made during the audit to reclassify grant receivables from the federal grants to the general fund totaling $142,753 and write these balances down to $0 (see Finding 2017-003 on page 37 of the audit report). Recipient Response: Some of the beginning accrued or deferred revenue amounts needed to be adjusted for the 2018 Single Audit, which we made adjustments to reconcile. This will be a repeat finding for FY 2018 but we are actively reviewing our beginning grants receivable balances for collectability and ensuring our deferred revenue balances are still outstanding. We anticipate these balances to be fully reconciled by the end of 2019. 10/9/19: Based on the Tribe's response, EPA will continue to work with the Tribe and track this corrective action. Status: Adhering	
19-P00251-410	Recommendation 1: Develop and implement a plan for improving the consistency of stack test reviews across EPA regions and delegated agencies.	2019-07-30
	Corrective Action 1-1: Planned: 2022-05-31 Completed: 0000-00-00 09/27/19: R10 will communicate information from OECA and OAR as it become available. Status: Adhering	
	Recommendation 2: Develop and implement a plan for improving the consistency of stack test reviews across EPA regions and delegated agencies.	
	Corrective Action 2-1: Planned: 2022-03-31 Completed: 0000-00-00 09/27/19: Per OIG, as an alternative to implementing R10 oversight controls that could be inconsistent with future guidance from EPA HQ, R10 agreed to conduct annual meetings w/state and local agencies to discuss their stack testing oversight activities. The first round of meetings by 3/31/2020 and continuing meetings through 3/31/2022. After OECA & OAR complete their Recommendations 1 & 3, R10 will meet w/its state and local agencies to discuss & implement any new stack test oversight policies & guidance. Status: Adhering	
19-S00301-410	Recommendation 1: We recommend that the Action Official confirm the corrective action the recipient identified in the single audit report was implemented on Findings 2017-003 and 2017-004. If the corrective action has not been implemented, EPA needs to obtain a corrective action plan, with milestone dates, for addressing the findings in the report.	2019-09-03
	Corrective Action 1-1: Planned: 2020-03-03 Completed: 0000-00-00 09/27/19: R10 sent an initial letter to the grantee for corrective actions for findings #3 (suspension and debarment compliance-related) and #4, ensure effective internal controls over payroll. Status: Adhering	

FY Audit Number	Recommendations and Corrective Actions	Report Date
	Recommendation 2: We recommend that the Action Official recover the $3,767 in questioned ineligible costs.	
	Corrective Action 2-1: Planned: 2020-03-03 Completed: 0000-00-00 09/27/2019: R10 sent an initial letter to the grantee for corrective action regarding unsupported costs in the amount of $3,767. Status: Adhering	
19-S00306-410	Recommendation 1: We recommend that the Action Official confirm the corrective action the recipient identified in the single audit report was implemented on Findings 2018-030 and 2018-031. If the corrective action has not been implemented, EPA needs to obtain a corrective action plan, with milestone dates, for addressing the finding in the report.	2019-09-16
	Corrective Action 1-1: Planned: 2020-03-16 Completed: 0000-00-00 09/30/2019: AFC met with and informed the Project Officer and Grant Specialist about the grantee corrective actions required. AFC will send grantee an initial follow-up letter to the grantee. Status: Adhering	
	Recommendation 2: We recommend that the Action Official recover the $116,027 in questioned ineligible costs.	
	Corrective Action 2-1: Planned: 2020-03-16 Completed: 0000-00-00 09/30/2019: AFC met with and informed the Project Officer and Grant Specialist about the grantee corrective actions required. AFC will send grantee an initial follow-up letter to the grantee. Status: Adhering	
19-S00324-410	Recommendation 1: We recommend that the Action Official confirm the corrective action the recipient identified in the single audit report was implemented on Findings 2018-016 and 2018-017. If the corrective action has not been implemented, EPA needs to obtain a corrective action plan, with milestone dates, for addressing the findings in the report.	2019-09-26
	Corrective Action 1-1: Planned: 2020-03-26 Completed: 0000-00-00 10/11/2019: R10 AFC initial letter to grantee for corrective action is being reviewed by management. AFC also contacted Project Officer and Grants Specialist about audit findings/correction actions. Status: Delayed	