FY 2020 EPA Budget in Brief





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Budget in Brief

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EPA's Mission

The mission of the United States Environmental Protection Agency (EPA) is to protect human health and the environment. This mission resonates with all Americans; we can all agree that we want a clean, healthy environment that supports a thriving economy. The Agency works to ensure future generations will inherit a better and healthier environment. In carrying out its mission, EPA works to ensure that all Americans are protected from exposure to hazardous environmental risks where they live, learn, work, and enjoy their lives. The Agency guides national efforts to reduce environmental and human health risks, based upon on-going research and scientific analysis.

EPA's FY 2020 Budget provides core environmental protections with respect to statutory and regulatory obligations. This budget provides the direction and resources to return EPA to its core mission of protecting human health and the environment. This can be accomplished by engaging with state, local, and tribal partners to create and implement sensible regulations that also work to enhance economic growth.

This strategy will be realized through the three strategic goals that guide EPA's approach to protect human health and the environment:

- Goal 1 Core Mission: Deliver real results to provide Americans with clean air, land, and water, and ensure chemical safety.
- Goal 2 Cooperative Federalism: Rebalance the power between Washington and the states to create tangible environmental results for the American people.
- Goal 3 Rule of Law and Process: Administer the law, as Congress intended, to refocus the Agency on its statutory obligations under the law.

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

EPA is proud to be a good steward of taxpayer resources and to deliver environmental protection efficiently. To learn more about how the Agency accomplishes its mission, including information on the organizational structure, please visit: http://www.epa.gov/aboutepa/.

FY 2020 Annual Performance Plan

EPA's FY 2020 Annual Performance Plan and Budget¹ of \$6.068 billion represents a \$2.76 billion, or 31 percent reduction from the Agency's FY 2019 Annualized Continuing Resolution (ACR)

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¹ The Budget includes a \$227 million cancellation of funds.

level. This resource level, including the Agency's requested 12,414.6 FTE, will enable EPA to support our highest priorities and fulfill our critical mission for the American people.

A major component of the FY 2020 Budget request is funding for infrastructure, including drinking water and clean water infrastructure, as well as for Brownfields and Superfund projects. Critical new grant programs are requested in FY 2020 to ensure the environmental safety of children in schools, and for work in maintaining essential water infrastructure for the American people. The Budget includes \$83 million and 19.6 FTE for new grant programs to begin implementing the recently enacted America's Water Infrastructure Act of 2018 (AWIA). The Budget also proposes a new \$50 million Healthy Schools Grant Program to target resources towards identifying, assessing and resolving environmental hazards in our Nation's schools. Ensuring the most vulnerable among us, especially children, are protected is a top priority of the Agency.

Acknowledging that environmental protection is a shared responsibility, funds are provided to our state and tribal partners through categorical grant programs. EPA recognizes 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. This Budget also provides essential resources to equip EPA in delivering vital emergency response services in environmental disasters that no one state can handle alone.

The EPA is focused on providing certainty to the American people and our co-regulators. EPA will prioritize certainty 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. Risk communication goes to the heart of EPA's mission and the Agency must speak with one voice when explaining to the American people the environmental and health risks they face in their daily lives. 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.

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 the EPA to be a catalyst for economic growth while strengthening our focus on protecting human health and the environment. This Budget supports implementation of Executive Order 13783, Promoting Energy Independence and Economic Growth, which directs all agencies to identify and propose measures to suspend, revise or rescind regulatory barriers that impede progress towards energy independence.

The FY 2020 Budget highlights actions that will enable EPA to reduce costs and effectively utilize limited resources. The Agency will work across all our programs to unite varied interests and stakeholders to focus attention and leverage federal, state, local, and non-governmental resources in a coordinated effort to address the Nation's greatest environmental and human health challenges.

FY 2018-2019 Agency Priority Goals

The budget highlights EPA's six FY 2018-2019 Agency Priority Goals² (APGs) that advance EPA priorities and the *FY 2018-2022 EPA Strategic Plan*.

Improve air quality by implementing pollution control measures to reduce the number of non-attainment 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.

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 program).

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).

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.

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 with their permit limits to 21% from a baseline of 24%.

Accelerate permitting-related decisions. By September 30, 2019, EPA will reduce by 50% the number of permitting-related decisions that exceed six months.

FY 2020 Funding Priorities

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 cleaning up contaminated land. In FY 2020, EPA will focus on making infrastructure and public health protection investments in communities by working with and through our state and tribal partners.

² Agency Priority Goals reflect the top two-year priorities that the Agency will implement to advance progress towards the three strategic goals.

A priority for the Agency is modernizing the aging water infrastructure on which the American public depends every day. This 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 2020 Budget includes \$1.98 billion for the State Revolving Funds (SRF), \$83 million to begin implementation of the new America's Water Infrastructure Act of 2018 (AWIA) legislation, and \$25 million for the Water Infrastructure Finance and Innovation Act (WIFIA) program.

The SRF funding directly supports infrastructure repair and replacement and would allow states, municipalities, and private entities to continue to finance high-priority infrastructure investments that protect human health. These resources additionally help to bring national, state and local water systems into compliance with environmental rules and regulations. SRF resources also provide critical funding to help replace lead pipes that may leach lead into the Nation's drinking water supply.

Clean and safe drinking water is critical to the health of communities across the Nation. While 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 strengthens EPA'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. The Budget includes five new programs to support the AWIA legislation, 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 will enable EPA to begin implementing the new law passed by Congress.

With \$25 million in FY 2020 WIFIA appropriations, EPA could potentially provide over \$2 billion in credit assistance, which, when combined with other funding sources, could spur over an estimated \$4 billion in total infrastructure investment.³ 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.

Given that EPA's infrastructure investments are catalysts for economic growth and environmental protection in communities across America, the Agency will continue to support private and public investment in economic revitalization that improves environmental outcomes across the country. EPA will identify opportunities to link infrastructure and community assistance program resources to spur similar, non-Agency investments with the goal of enhancing the collective impact those resource have in communities. Through the combined work of the SRFs, AWIA, and WIFIA, EPA will ensure that it is serving disadvantaged communities, leveraging private investment to improve the economy, and protecting human health and the environment.

³ This approximation is based on notional calculations. Subsidy cost is determined on a loan-by-loan basis.

Improving Air Quality

In FY 2020, the 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, training, and information to support state clean air plans. EPA will continue to prioritize statutorily mandated responsibilities and court-ordered actions. A focus will continue to be placed 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.

In FY 2020, the Federal Vehicle and Fuels Standards and Certification program will focus its efforts on certification decisions, which directly support environmental protection and commerce. The Agency will 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 Budget includes a proposal to authorize 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 save money and help protect the environment.

Air monitoring, which provides information to states used to develop clean air plans, for research, and for the public, will continue to be a focus of the Agency. In FY 2020, 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 to reduce contaminants that cause or exacerbate health issues.

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 2020, the Agency will continue to 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. The 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 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. On February 14, 2019, EPA announced a new Per- and Polyfluoroalkyl Substances (PFAS) Action Plan to help states and local

communities address PFAS and protect our nation's drinking water. In FY 2020, the Agency will continue to emphasize efforts on small and rural community water systems. EPA will coordinate and support the protection of the Nation's critical water infrastructure from terrorist threats and all-hazard events through ongoing Homeland Security programs.

Revitalizing Land

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.

The FY 2020 Budget includes \$1.056 billion to revitalize land and prevent future contamination. In FY 2020, emphasis will be placed on the Agency's top priority list of Superfund sites.⁴ 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 (NPL) site deletions. Further, the Agency will focus 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 Focus List⁵, and will promote additional private investment in cleanup activities as recommended by the Superfund Task Force⁶.

EPA also will invest in communities through Brownfields grants so they can realize their visions for environmental health, economic growth, and job creation. As of November 2018, grants awarded by the program have led to over 77,000 acres of idle land made ready for productive use, with over 141,300 jobs created and \$26.8 billion leveraged. In FY 2020 alone, Brownfields program activities will leverage approximately 5,500 more jobs and \$1 billion in other funding sources.

Ensuring the Safety of Chemicals

In FY 2020 resources will support the Agency's significant continuing and new responsibilities under the Toxic Substances Control Act (TSCA) 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 TSCA and ensuring reviews are efficient, effective, and transparent to stakeholders.

⁴ https://www.epa.gov/superfund/superfund-sites-targeted-immediate-intense-action

⁵ https://www.epa.gov/superfund-redevelopment-initiative/superfund-redevelopment-focus-list

⁶ https://semspub.epa.gov/work/HQ/197209.pdf

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. EPA will work aggressively to complete the 10 chemical risk evaluations initiated in December 2016 and continue prioritization efforts to identify future chemicals for evaluation.

New chemicals will be evaluated before they are allowed to commercialize, and decisions will be based on best available science and the weight of evidence. EPA's toxics program will maintain its 'zero tolerance' goal for preventing the introduction of 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, \$66.4 million is requested in FY 2020 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 2020, the Agency will also continue to provide firm and individual certifications for safe work practices for lead-based paint abatement and renovation and repair efforts, as well as 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 2020, 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. A portion of the 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 ensures pesticides available in the U.S. are safe when used as directed.

Protecting our Children

EPA is committed to aggressively addressing lead issues across America, working with communities and partners to further identify and reduce lead exposure, especially for children who are most vulnerable. 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, children may be exposed to additional environmental hazards beyond lead, particularly in outdated schools and educational centers. To address this multifaceted issue, the FY 2020 Budget proposes \$50 million to establish a new 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 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.

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 holdups in the permitting process will continue to ensure that unnecessary delays do not get in the way of environmental protection or economic growth. In FY 2020, \$28 million is requested to advance deregulation, permitting work, and technical assistance for our co-regulatory partners.

Establishing New Fees

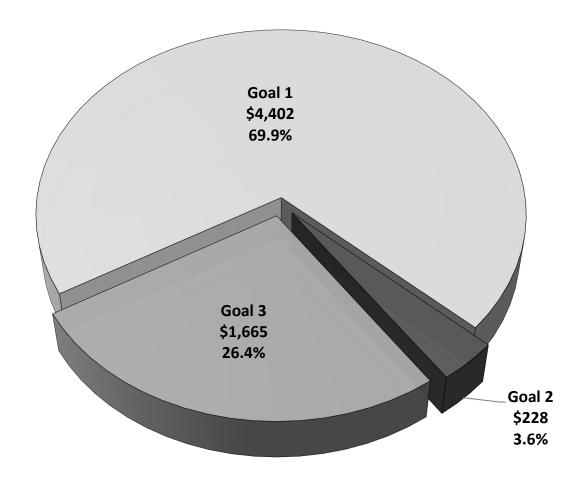
EPA continues to propose several new fees in FY 2020 to better align appropriated resources to the Agency's core mission, to provide dedicated funding sources for specific activities and to better align program costs with beneficiaries. By administering select EPA programs through the collection of user 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 2020. 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 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.

Eliminated Programs

Programs and activities eliminated in the FY 2020 Budget total over \$650 million compared to FY 2019 Annualized Continuing Resolution levels. Details are found in [www.epa.gov/cj]. The Administration is committed to creating a leaner, more accountable, less intrusive, and more effective Government.

Environmental Protection Agency's FY 2020 Budget by Goal

Total Agency: \$6,068 Million (Dollars in Millions)

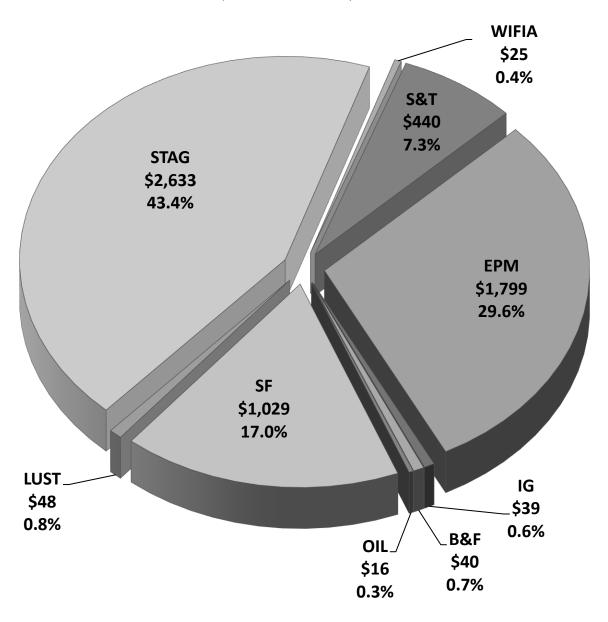


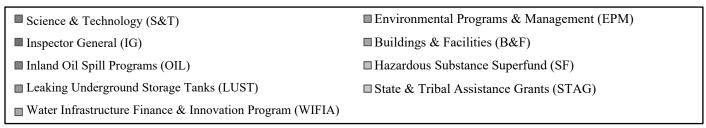
□ Goal 1: Core Mission □ Goal 2: Cooperative Federalism □ Goal 3: Rule of Law and Process

Notes: Total Agency budget includes a proposed \$227 million cancellation of funds that is not reflected in chart totals.

Environmental Protection Agency's FY 2020 Budget by Appropriation

Total Agency: \$6,068 Million (Dollars in Millions)



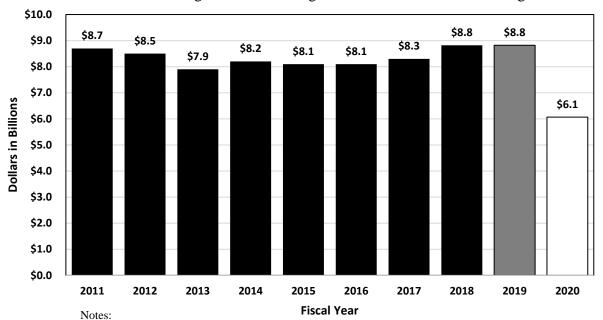


Notes: Totals may not add due to rounding.

In FY 2020, the E-Manifest system will be fully funded through user fees. Totals and percentages include a proposed \$227 million cancellation of funds.

EPA's Enacted Budget FY 2011 to FY 2020

■ Enacted Budgets ■ Continuing Resolution □ President's Budget



All Agency totals include applicable rescissions.

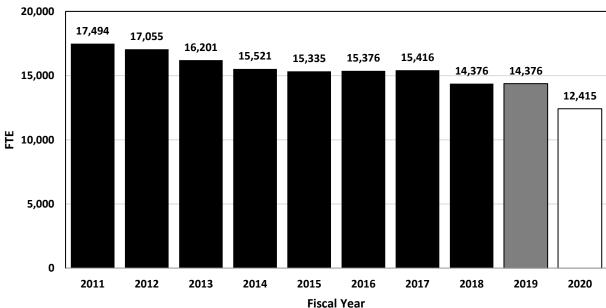
FY 2013 Enacted excludes Hurricane Sandy Relief supplemental funding.

FY 2019 is reported at the Annualized Continuing Resolution funding level.

FY 2020 President's Budget Request includes a proposed \$227 M cancellation of funds.

EPA's FTE Ceiling History FY 2011 to FY 2020

■ Enacted Budgets ■ Continuing Resolution □ President's Budget



Notes

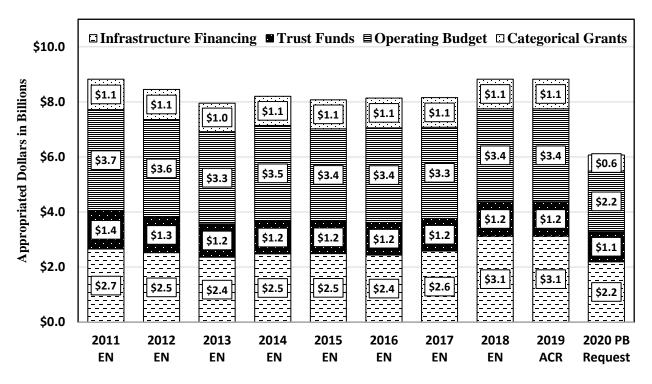
FTE (Full Time Equivalent) = one employee working full time for a full year (52 weeks \times 40 hours = 2,080 hours), or the equivalent number of hours worked by several part-time or temporary employees. Reimbursable FTE are included.

FY 2019 is reported at the Annualized Continuing Resolution funding level.

EPA's Resources by Major Category

(Dollars in Billions)

EN – Enacted, ACR – Annualized Continuing Resolution, PB – President's Budget



Fiscal Year

Notes:

Totals may not add due to rounding

- FY 2011 Enacted reflects a 0.2% rescission and \$140 M rescission to prior year funds
- FY 2012 Enacted reflects a 0.16% rescission and \$50 M rescission to prior year funds
- FY 2013 Enacted reflects operating levels after sequestration, excludes Hurricane Sandy Relief supplemental appropriation of \$608 M and reflects a 0.2% rescission and \$50 M rescission to prior year funds
- FY 2014 Enacted does not have a rescission
- FY 2015 Enacted reflects a \$40 M rescission to prior year funds
- FY 2016 Enacted reflects a \$40 M rescission to current year funds
- FY 2017 Enacted reflects a \$90 M rescission to current year funds
- FY 2018 Enacted reflects a \$148.8 M rescission to current year funds
- FY 2019 is reported at the Annualized Continuing Resolution funding level
- FY 2020 President's Budget Request includes a proposed \$227 M cancellation of funds

Goal 1: Core Mission

Strategic Goal: Deliver real results to provide Americans with clean air, land, and water, and ensure chemical safety.

Core Mission	FY 2018 Enacted Budget	FY 2019 Annualized CR	FY 2020 President's Budget	Delta FY 2020 - FY 2019
1.1 - Improve Air Quality	\$789,367	\$789,367	\$425,321	(\$364,046)
1.2 - Provide for Clean and Safe Water	\$4,388,076	\$4,388,076	\$2,695,245	(\$1,692,831)
1.3 - Revitalize Land and Prevent Contamination	\$1,333,325	\$1,333,325	\$1,055,594	(\$277,731)
1.4 - Ensure Safety of Chemicals in the Marketplace	\$240,716	\$240,716	\$226,183	(\$14,533)
Goal 1 Total	\$6,751,484	\$6,751,484	\$4,402,343	(\$2,349,141)
Total Workyears	6,813.7	6,813.7	5,936.0	(877.7)

Note: Totals do not include proposed Agency-wide cancellation of funds.

Introduction

Pollution comes in many forms with a myriad of impacts on human health and the environment. With the goal of clean and safe air, water, and land as well as safe chemicals for all of America, Congress enacted a range of environmental statutes that spell out EPA's responsibilities. Our Nation has come a long way since EPA was established in 1970. We have made great progress in 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.

In FY 2020, the Agency will work with states and tribes to approve their implementation plans for attaining air quality standards, reducing air pollutants and toxics that can cause or exacerbate health issues. We will work with our state and tribal partners to provide for clean and safe water by updating aging infrastructure, both for drinking water and wastewater systems. EPA will continue to focus on speeding the cleanup of Superfund and brownfields sites, prioritizing efforts on a list of top priority sites to advance progress on Superfund sites of concern. 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 modernizes the Toxic Substances Control Act (TSCA) by creating new standards and processes for assessing chemical safety within specific deadlines. 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 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 implement federal environmental laws where eligible tribes or states have not taken program responsibility.

With our partners, we will pay particular attention to vulnerable populations. 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. 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. The needs of small and rural communities may not be the same as urban areas. Together with our partners, we will continue making progress in protecting human health and the environment. The Healthy Schools Grant Program proposed in the Budget is intended to address potential gaps in school environmental health information 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, in the identification and mitigation of potential environmental health issues.

The Agency also 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. The FY 2020 Budget includes support for ongoing information technology (IT) modernization work and the E-Enterprise for the Environment initiative. These efforts can enhance efficiency and improve the service delivery of our core environmental programs, reduce the time and burden associated with reporting, and make more environmental data available through shared systems.

Agency Priority Goals

The Budget highlights EPA's FY 2018-2019 Agency Priority Goals (APGs) that advance EPA priorities and the *FY 2018-2022 EPA Strategic Plan*. Four of the six APGs support Goal 1:

- 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.
- 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).

¹ For EPA's APG Action Plans and Quarterly Updates, see https://www.performance.gov/EPA/

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- 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).
- 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 premanufacture notice final determinations.

FY 2020 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 101.²

Key priorities for the Agency in FY 2020 continue to be re-designating areas to attainment, improving the efficiency of the State Implementation Plan review process, and streamlining the air permitting process. This strategic objective also is supported by other core air program work highlighted below.

EPA is dedicated to working 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 PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), ozone, carbon monoxide (CO) and lead (Pb). Between 1970 and 2017, the combined emissions of these six criteria pollutants dropped by 73 percent.³ This progress occurred while the U.S. economy, as measured by Gross Domestic Product, grew by over 260 percent,⁴ Americans drove more, and population and energy use increased. Despite this great progress in air quality improvement, in 2017, approximately 111 million people nationwide lived in counties with pollution levels that did not meet standards for at least one criteria pollutant, or 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 2020, EPA requests \$425.3 million and 1,270.8 FTE to improve air quality. Highlights include:

² The baseline is 166 nonattainment areas as of 10/1/2017.

³ 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.

⁴ https://gispub.epa.gov/air/trendsreport/2018/#growth w cleaner air

National Ambient Air Quality Standards (NAAQS) 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 2020, EPA requests \$111.1 million for the Federal Support for Air Quality Management program to advance this important work.

In FY 2020, EPA will continue to prioritize key activities in support of attainment of the NAAQS. The Agency will address 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; taking federal oversight actions such as approving state implementation plan (SIP) and tribal implementation plan (TIP) submittals consistent with statutory obligations; developing regulations and 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 move more rapidly to attainment of air quality standards.

Air Toxics

The Air Toxics program develops and implements national emission standards for stationary and mobile sources and works with state, tribal and local air agencies to address air toxics problems in communities. As required every eight years by the CAA, EPA reviews air toxics emissions standards to determine if additional emission control technologies exist. If so, EPA proposes more effective emission control technologies based on these reviews. EPA also conducts reviews to determine if risk remains within eight years after certain air toxics standards have been promulgated.

In FY 2020, the Budget includes \$17.3 million for the Federal Stationary Source Regulations program. EPA will continue to prioritize CAA and court-ordered obligations and will tier its work with an emphasis on meeting court-ordered deadlines to align with priorities and capacity. EPA will continue to conduct reviews and risk assessments to determine whether the promulgated standards appropriately protect public health as required by Section 112 of the CAA.

Grants for State, Local and Tribal Air Quality Management

For FY 2020, 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 also will operate and maintain their existing monitoring networks at baseline levels to provide high quality data used to develop and maintain clean air plans, to support research, and for 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 managers on a variety of transportation programs.

In FY 2020, EPA requests \$77.8 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 once their products have been certified. EPA will continue to ensure clean and safe air levels while providing certainty and flexibility to the regulated community. 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 NOx emissions from heavy-duty trucks. In FY 2020, as a part of this rulemaking effort, EPA will evaluate the technologies which can ensure real-world compliance with emissions standards and will also seek opportunities to modernize and streamline the regulatory framework for the heavy-duty highway sector.

Atmospheric Protection Program

EPA implements 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 shared with industry stakeholders, state and local governments, the research community, and the public to better understand emissions, inform decisions, and communicate progress of actions. The data also informs the annual Greenhouse Gas Inventory, a U.S. treaty obligation. In addition, EPA will work to complete the annual Inventory of U.S. Greenhouse Emissions and Sinks. In FY 2020, EPA requests \$14 million to continue to implement the Atmospheric Protection program.

Energy Star Program Fee Proposal Implementation

In FY 2020, 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 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 2020 expenses to develop, operate, and maintain the Energy Star program.

Radiation

The Agency measures and monitors ambient radiation and radioactive materials and assesses radioactive contamination in the environment. The Agency supports federal radiological emergency response and recovery operations under the National Response Framework (NRF) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). In FY 2020, the budget includes \$11.2 million for the Radiation: Protection and Radiation: Response Preparedness programs.

The Agency has specific statutory responsibilities to protect the public from harmful radiation through federal guidance and standard-setting activities, including: regulatory oversight at the Department of Energy's Waste Isolation Pilot Plant (WIPP);⁵ the regulation of airborne radioactive emissions; and the development and determination of appropriate methods to measure radioactive releases and exposures under CAA Section 112.

In FY 2020, 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 will design and conduct essential training and exercises to enhance the RERT's ability to fulfill EPA's responsibilities and improve overall radiation response preparedness. The Agency also will continue to operate the Agency's nationwide fixed ambient environmental radiation monitoring network, RadNet.

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 2,700.⁶
- By September 30, 2022, increase by \$40 billion the non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).⁷
- By September 30, 2022, reduce the number of square miles of watershed with surface water not meeting standards by 37,000 square miles.⁸

Providing support to ensure safe drinking water in communities, increasing investment in water infrastructure projects, and protecting surface water are high 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 sources received little or no treatment, and drinking water systems provided very limited treatment to water coming through the tap. Now, nearly 93 percent of the population served by community water systems receives water that meets all applicable health-based drinking water standards, and formerly impaired waters have been restored and now support recreational and public health uses that contribute to healthy economies. A top priority for EPA is modernizing the outdated water infrastructure on which the American public depends. The America's Water Infrastructure Act of

⁵ Additional information at: http://www.epa.gov/radiation/wipp/background.html.

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.)

⁷ The 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 Strategic Plan*).

 $^{^8}$ Draft baseline is 464,020 square miles of impaired waters as of September 2017, to be updated in FY 2019. (Footnote updated from FY 2018-2022 Strategic Plan.)

2018 (AWIA) was enacted to help address numerous drinking water and wastewater issues at large projects and small rural communities.

In FY 2020, EPA will focus resources on supporting the modernization of outdated 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 infrastructure. Given that investment in infrastructure is necessary for economic growth and environmental protection and that EPA investments are catalyst for both, EPA's efforts will be used to 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 drinking water SRF, clean water SRF, 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 improve the economy, and protecting human health and the environment.

In FY 2020, EPA requests \$2.695 billion and 1,585.1 FTE to support this strategic objective, which is also supported by other core water program work. Highlights include:

Water Infrastructure Investments

We have 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 2020.

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 Water Infrastructure Finance and Innovation Act (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 two rounds of applications and selected projects, the program encourages a wide variety of finance approaches.⁹

A top priority for EPA is modernizing the outdated water infrastructure on which the American public depends. In FY 2020, EPA requests \$1.983 billion for the State Revolving Funds and \$25 million for the WIFIA program. The FY 2020 capitalization of the SRFs would supplement approximately \$80 billion currently revolving at the state level. WIFIA is expected to leverage

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⁹ https://www.epa.gov/wifia/wifia-letters-interest

significant funding for infrastructure and 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.¹⁰

The America's Water Infrastructure Act of 2018 (AWIA) was recently enacted to help address numerous drinking water and wastewater issues at large projects and small rural communities. EPA is focused on implementing several mandates included in the law, which 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 strengthened 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 access clean and safe water. New mandates range from the creation of grant programs to promoting water quality workforce development. AWIA mandates will be critical to advancing Agency priorities by increasing water infrastructure investment and improving drinking water and water quality across the country. In FY 2020, five new program projects are requested to implement AWIA legislation including: Drinking Fountain Lead Testing, Drinking Water Infrastructure Resilience, Sewer Overflow Control Grants, Technical Assistance for Treatment Works, and Water Infrastructure and Workforce Investment.

In addition to AWIA, 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 2020, EPA will work to implement the mandates included in this new legislation.

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 are best positioned to 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.

In FY 2020, EPA requests funding for the following categorical grants that support state and tribal implementation of the CWA and the SDWA: Public Water System Supervision, Pollution Control (CWA Section 106), Underground Injection Control (UIC), and Wetlands Program Development 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 the categorical grants to states and tribes to support core water programs is \$248.3 million, including \$10 million for the Multipurpose Grant program, which is a flexible grant program to support multiple statutory responsibilities, including water programs.

Safe Drinking Water

For FY 2020, EPA requests \$93.9 million to support Drinking Water programs. EPA will work to reduce lead risks by working on the next step to the Lead and Copper Rule and developing

¹⁰ This approximation is based on notional calculations. Subsidy cost is determined on a loan-by-loan basis.

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) tool used by the majority of state drinking water programs. The tool 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 reduction in public health risk.

Clean Water

In FY 2020, EPA requests \$188.2 million for the Surface Water Protection program and \$21.6 million for the Wetlands program. The FY 2020 Budget 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 infrastructure and grants management; core wetlands programs and CWA Section 106 program management. 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 works with states to structure the permit program, support its implementation and to better pursue protection of water quality on a watershed basis.

Homeland Security

In FY 2020, EPA will coordinate and support protection of the Nation's critical water infrastructure from terrorist threats and all-hazard events. Under this homeland security mission, EPA will annually train over 2,500 water utilities, state officials, and federal emergency responders on resiliency to natural or manmade incident 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 2020, 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. 11

¹¹ By the end of FY 2017, 836 Superfund sites had been made RAU site-wide.

- By September 30, 2022, make 3,420 additional brownfields sites RAU. 12
- By September 30, 2022, make 536 additional Resource Conservation and Recovery Act (RCRA) corrective action facilities RAU.¹³
- By September 30, 2022, complete 56,000 additional leaking underground storage tank (LUST) cleanups that meet risk-based standards for human exposure and groundwater. 14

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 2020, 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 the Resource Conservation and Recovery Act (RCRA) provide 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. 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 collaborates with international, state, tribal, and local governments while considering the effects of decisions on communities. EPA 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 the Agency must speak with one voice when explaining to the American people the environmental and health risks they face in their daily lives. 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 2020, EPA requests \$1.056 billion and 2,059.5 FTE to support this objective. To maximize effectiveness, EPA will focus on implementing core programs where a federal presence is required by the statute. This strategic objective is supported by core land program work. 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

¹² From FY 2006 through the end of FY 2017, 5,993 brownfield properties/sites had been made RAU. (Footnote updated from *FY 2018-2022 Strategic Plan.*)

¹³ 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 Strategic Plan.)

¹⁴ By the end of FY 2017, 469,898 LUST cleanups had been completed

promotes the redevelopment of blighted areas. For FY 2020, EPA requests \$856 million to fund EPA's cleanup programs.

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. Superfund properties are often reused as commercial facilities, retail centers, government offices, residential areas, industrial and manufacturing operations, parks, and recreational areas. At the end of FY 2018, 887 Superfund sites had been determined to be Sitewide Ready for Anticipated Use (RAU) out of a total of 1,836 Superfund sites. During FY 2018, 51 Superfund sites were made RAU. EPA data shows that as of FY 2017 at the 487 Superfund sites in reuse, approximately 6,622 businesses are generating \$43.6 billion in sales. These businesses employ 156,352 people who earn a combined income of \$11.2 billion. 15

In 2017, EPA convened a Superfund Task Force that identified 42 recommendations to streamline and improve the Superfund process. EPA has implemented 43 percent of the recommendations, expediting the reduction of risks to human health and the environment and accelerating the reuse of properties affected by hazardous substance contamination. In July 2018, EPA released an update to the Superfund Task Force report highlighting these accomplishments and emphasizing next steps for all open recommendations. ¹⁶ EPA expects to implement all the remaining recommendations by July 2019. In FY 2020 the program will continue to update the program goal to advance cleanup.

Building on recommendations from the Superfund Task Force Report, the Agency will continue to help communities clean up 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 including: reducing mortality and morbidity risk; preventing and reducing human exposure to contaminants; improving nearby property values; making land available for commercial, residential, industrial, or recreational reuse; and promoting community economic development. For example, 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 NPL.¹⁷

In FY 2020, EPA requests \$472.1 million for the Superfund Remedial program. EPA will continue its statutory responsibility to provide oversight of potentially responsible parties (PRP)-lead activities at Superfund sites, consistent with legal settlement documents, and statutorily required five-year reviews.

Superfund Federal Facilities

The 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

¹⁵ For more information on Redevelopment Economics and in-depth case studies see www.epa.gov/superfund-redevelopment-initiative/redevelopment-economics-superfund-sites.

¹⁶ Please see the Superfund Task Force Recommendations 2018 Update at https://semspub.epa.gov/work/HQ/197209.pdf

¹⁷ 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.

dangerous and unique environmental contaminants, including munitions, radiological waste, and emerging contaminants such as per-and polyfluoroalkyl substances (PFAS). EPA works closely with other federal agencies, states, tribes, and stakeholders to ensure protective and cost-effective cleanups at these NPL sites. The Agency requests \$20.5 million for this program in FY 2020.

Superfund Removal

From FY 2009 to FY 2018, EPA completed or oversaw over 3,427 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 case of a national 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. ¹⁸ In FY 2020, EPA requests \$168.4 million for the Superfund Emergency Response and Removal program.

RCRA Corrective Action

EPA works in partnership with states to carry out its mission and has authorized 44 states and one territory to directly implement the RCRA Corrective Action program¹⁹. This 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 advance this work, the Budget includes \$33.2 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. FY 2018 data show that, of the approximately 543,800 releases reported since the beginning of the UST program in 1988, more than 478,000 (or 88 percent) have been cleaned up. Approximately 65,450 releases remain that have not reached cleanup completion. EPA is working with states to develop and implement specific strategies and activities applicable to their particular sites to reduce the UST releases remaining to be cleaned up. The important work of this program is demonstrated by a 2017 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. EPA requests a total of \$51.6 million in FY 2020 for Underground Storage Tank direct cleanup and state cooperative agreements.

 $^{{}^{18}} For additional information, refer to: \underline{https://www.epa.gov/emergency-response/national-oil-and-hazardous-substances-pollution-contingency-plan-ncp-overview.}$

¹⁹ State implementation of the RCRA Corrective Action program is funded through the STAG (Program Project 11) and matching State contributions.

²⁰Guignet, 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(C): 259-282. https://doi.org/10.1016/j.jeem.2017.12.003.

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. ²¹ By awarding Brownfields grants, EPA is making investments in communities so that they can realize their visions for environmental health, economic growth, and job creation. As of November 2018, grants awarded by the program have led to over 77,000 acres of idle land made ready for productive use and over 141,300 jobs and \$26.8 billion leveraged. ²² During FY 2018, 861 Brownfields sites were made RAU. In FY 2020, the Agency will continue to make additional Brownfields sites RAU. A 2017 study found that housing property values increased 5 to 15.2 percent near Brownfield sites when cleanup was completed. ²³ Another 2017 study of 48 Brownfield 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. ²⁴ The FY 2020 Budget includes \$110.5 million 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. With our state and tribal partners, EPA works to prevent releases of contamination, allowing the productive use of facilities and land and contributing to communities' economic vitality, while avoiding expensive cleanup costs.

Chemical Facility Safety

EPA plays a valuable role in working with states and communities to build the 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 2020, 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 2020, EPA requests \$10.5 million for the State and Local Prevention and Preparedness program.

State and Local Prevention and Preparedness Fee Proposal

EPA proposes 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 2020 Budget submission.

RCRA Waste Management

States have primary responsibility for almost all the efforts related to permitting hazardous waste units (such as incinerators and landfills) at treatment, storage, and disposal facilities. In FY 2020,

²¹ 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.

²² EPA's ACRES database.

²³ 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.

²⁴ Sullivan, Karen A. Journal of Environmental Assessment Policy and Management Vol. 19, No. 3 (September 2017) 1750013, https://www.worldscientific.com/doi/pdf/10.1142/S1464333217500132

permits for these activities will be issued, updated, or maintained as necessary. EPA directly implements 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 reviews and approves Polychlorinated Biphenyls (PCB) cleanup, storage, and disposal activities as this federal authority is not delegable to state programs. The FY 2020 Budget includes an increase of \$3 million, including 14 FTE, to execute a delegation to states and to develop and implement a permit program for coal combustion residuals. The FY 2020 Budget provides \$46.8 million to the RCRA Waste Management 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. When fully implemented, the electronic hazardous waste manifest system will reduce the reporting burden to regulated facilities by approximately \$90 million annually. In FY 2020, EPA will operate the e-Manifest system and the Agency will collect and utilize fees for the full costs of operation of the system and necessary program expenses.

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 2020, EPA requests a total of \$12.4 million for the Oil Spill Prevention, Preparedness and Response program to continue to ensure compliance with preventative measures 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

EPA proposes 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 or radiological (CBR) 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 2020 Budget includes \$55.9 million to maintain Agency capability to respond to incidents that may involve harmful CBR substances. Resources will allow the Agency to develop and maintain expertise and operational readiness to respond to emergencies.

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.²⁵
- By September 30, 2022, complete all TSCA risk management actions for existing chemicals in accordance with statutory timelines. ²⁶
- By September 30, 2022, complete all TSCA pre-manufacture notice final determinations in accordance with statutory timelines.²⁷
- By September 30, 2022, complete all cases of Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)-mandated decisions for the pesticides registration review program. ²⁸
- By September 30, 2022, reduce the Pesticide Registration Improvement Act (PRIA) registration decision timeframe by an average of 60 days.²⁹

Chemicals and pesticides released into the environment as a result of their manufacture, processing, use, or disposal can threaten human health and the environment. EPA gathers and assesses information about the risks associated with pesticides and other chemicals and implements risk management strategies when needed. Additionally, EPA's research efforts play an important role in advancing the Agency's ability to assess chemicals more rapidly and accurately.

In FY 2020, EPA requests \$226.2 million and 1,020.6 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. These amendments gave EPA significant new, as well as continuing, responsibilities for ensuring that chemicals in or entering commerce do not present unreasonable

²⁵ There is no baseline for this measure, as the program is operating under new statutory authority

²⁶ There is no baseline for this measure, as the program is operating under new statutory authority.

²⁷ Baseline is 58.4% of determinations made within 90 days in FY 2018. (Footnote updated from *FY 2018-2022 EPA Strategic Plan.*)

²⁸ 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.*)

²⁹ 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.

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 is engaged in a wide range of TSCA implementation activities that will enable the Agency to meet the strategic objective and associated long-term performance goals and FY 2018-2019 Annual Priority Goal included in the *FY 2018-2022 EPA Strategic Plan*. The Agency expects to complete risk evaluations under the amended TSCA for the initial set of ten chemicals in December 2019, in accordance with statutory timelines. Substantial progress has already been made, with the publication of scoping documents for these evaluations on schedule in June 2017, followed by problem formulation documents in June 2018. In FY 2020, EPA will commence risk evaluations for an additional 20 High-Priority chemicals in compliance with a statutory directive to maintain a pace of 20 EPA-initiated evaluations and identify 20 Low-Priority Chemicals which will not undergo risk evaluation. EPA will develop risk management actions to address any unreasonable risks identified through the evaluation process. In addition, the Agency expects to make further progress in streamlining new chemical review as the recommendations of a Lean management study continue to be put into practice. The Budget request includes \$66.4 million to support the Chemical Risk Review & Reduction program.

Healthy Schools Grant Program

The Healthy Schools Grant Program is proposed as a new program in FY 2020 and is designed to protect children and teachers in environments in which they live, play and work. Under this program, funding would be available to identify and help prevent, reduce and resolve environmental hazards and prevent 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.

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. EPA recognizes that school environmental health challenges differ due to variations in geography, age of school infrastructure, population density, and other factors. In FY 2020, EPA requests \$50 million to initiate this new grant program which will target the highest priority efforts to protect human health and the environment in school settings.

Toxics Release Inventory (TRI)

EPA's success in carrying out its mission to protect human health and the environment is contingent in part on collecting and making available timely, high-quality and relevant information. 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 to better manage information flows and scientific tools and models. EPA's FY 2020 Budget proposal includes \$7.8 million for 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, considering 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 by October 1, 2022. Forward planning serves to ensure, through 2022, EPA will complete all FIFRA-mandated decisions for the Pesticides Registration Review program. At the end of FY 2018, 304 interim or final decisions 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 (FQPA). 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 2020, \$99.4 million is provided to support EPA's Pesticide Registration Review and Registration program. 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 2020, appropriated funding will be augmented by approximately \$49 million in pesticides registration and maintenance user fees. The Budget also includes a proposal to expand the use of pesticide fees to support a wider range of registration and registration review activities.

In FY 2020, 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. EPA's FY 2020 activities will continue to involve increased efforts on comprehensive risk assessments to protect the environment.

The Agency also will continue to invest resources to improve the compliance of pesticide registrations with the Endangered Species Act. A portion of the 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 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.

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. The Agency's worker protection, certification, and training programs will encourage safe pesticide application practices. EPA will continue to emphasize reducing exposures from pesticides used in and around homes, schools, and other public areas to be protective of human health.

Goal 2: Cooperative Federalism

Strategic Goal: Rebalance the power between Washington and the states to create tangible environmental results for the American people.

Cooperative Federalism	FY 2018 Enacted Budget	FY 2019 Annualized CR	FY 2020 President's Budget	Delta FY 2020 - FY 2019
2.1 - Enhance Shared Accountability	\$306,554	\$306,554	\$225,584	(\$80,970)
2.2 - Increase Transparency and Public Participation	\$16,197	\$16,197	\$2,739	(\$13,458)
Goal 2 Total	\$322,751	\$322,751	\$228,323	(\$94,428)
Total Workyears	1,145.6	1,145.6	850.0	(295.6)

Note: Totals do not include proposed Agency-wide cancellation of funds.

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. Most of the major environmental statutes provide states and tribes the opportunity and responsibility for implementing and sustaining environmental and human health protection programs. More than 45 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. States have assumed more than 96 percent of the delegable authorities under federal law. 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, and programs which are delegable, but for which the state, tribe or territory has not sought delegation. Taking a renewed look at them will facilitate constructive dialogue with states and tribes to ensure maximum utilization of resources. 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. The EPA is focused on providing certainty to the American people, our co-regulators, and the regulated community. EPA will prioritize certainty 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.

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 positive environmental results. Improvements to protecting human health and the environment cannot be achieved by any single actor. Success is derived when

¹ Environmental Council of the States (ECOS) Paper, "Cooperative Federalism 2.0," June 2017

the states, tribes, territories, and EPA, in conjunction with affected communities, work together in a spirit of trust, collaboration, and partnership. Effective environmental protection is best achieved when EPA and its state and tribal partners collaborate transparently, welcome public participation and embrace a shared accountability for the outcomes. Active platforms for public participation, including building the capacity of community stakeholders to provide input, encourages deeper collaboration. With 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. Including the public's voice in EPA's policy, regulatory, and assistance work, particularly the voices of the most vulnerable among us to environmental and public health challenges, is essential to meeting their needs as the Agency's statutory responsibilities are implemented.

EPA also recognizes meeting the needs of states, tribes, territories, local governments, and communities, and achieving environmental improvements cannot be accomplished without consideration of economic growth. Opportunities for economic growth in tandem with clean air, water, and land are lost without effective infrastructure investments aligning to community needs. This is especially true for infrastructure investments that repair existing systems; support revitalization of existing communities and buildings; and lead to the cleanup and redevelopment of previously used sites and buildings. A prime example of cooperative federalism fostering development in communities is EPA's State Revolving Fund (SRF) programs. The revolving nature of the Drinking Water and Clean Water SRF funds and substantial state contributions has greatly expanded the scope of the federal investment. EPA estimates for every federal dollar contributed to date, the Nation has received close to three dollars of water infrastructure investments in return. EPA will 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.

FY 2020 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.²
- By September 30, 2022, increase the use of alternative shared governance approaches to address state, tribal, and local community reviews.³

² Universe (number of commitments contained in Performance Partnership Grants) and FY 2020 target will be determined in FY 2019. (Footnote updated from FY 2018-2022 EPA Strategic Plan.)

³ There is no baseline for this measure. (Footnote updated from FY 2018-2022 EPA Strategic Plan.)

In the spirit of cooperative federalism, EPA and its partners have made enormous progress in protecting air, water, and land resources. 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; each organization fulfills a critical role based on its expertise, abilities, and responsibilities to protect and improve human health and the environment. 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 2020 Budget includes \$10 million for the Multipurpose Grants, which are an example of this commitment to cooperative federalism. These grants afford flexibility to our state and tribal partners by allowing them to target funds toward their highest priority environmental statutory responsibilities consistent with EPA statutes.

EPA recognizes the advances states and tribes have made in implementing environmental laws and programs. This Administration is undertaking a series of initiatives to rethink and reassess where we are and where we want to be 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 lays out the process by which states can take charge of their own pollutant discharge elimination systems. EPA's recent approval of Idaho's program is a great example of EPA working cooperatively with states to provide them certainty with respect to water permitting. The Agency also is collaborating with states to improve air quality. Since March 2017, EPA has turned an average of one Federal Implementation Plan into a State Implementation Plan each month. These actions provide states clarity and certainty as they strive to reduce air pollution.

The Agency will continue to work closely with our state and tribal partners to ensure our mutual responsibilities under the law are fulfilled. For example, permitting issues can heavily impact small and mid-sized businesses – the backbone of the American economy. We are now systematically tracking the time it takes to issue permits. The Agency's goal is to make all permitting decisions in six months with respect to CWA National Pollutant Discharge Elimination System, Underground Injection Control, and Resource Conservation and Recovery Act (RCRA) permits. For New Source Review permits, the goal is one year from the receipt of a complete application.

In FY 2020, \$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 those tribes choosing to do so, 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 2020, EPA requests \$224.5 million and 831 FTE to enhance EPA's shared accountability and build cooperative federalism. Highlights include:

Shared Governance

To develop a future model of shared governance – engaging early and meaningfully with states and tribes – taking into account the progress states and tribes have made in protecting human health and the environment, the Agency will focus on core statutory roles and responsibilities. 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. As part of this process, the Agency will work in close collaboration with co-regulators to better understand best practices and approaches that improve environmental program management. The Agency will continue to streamline processes where EPA must review and approve state and tribal actions (e.g., permit reviews). EPA will continue to work with states and tribes through E-Enterprise for the Environment to agree on shared priorities and allocate roles and responsibilities to inform and update processes and programs. Through shared governance the Agency uses E-Enterprise for the Environment to deliver streamlined processes as well as accessible, reliable information and data that benefit co-regulators and the regulated community. EPA is also exploring the use of a new reporting tool which will reduce reporting burdens while enhancing transparency in grant commitment setting across EPA regions.

EPA's work in FY 2020 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. The Agency actively works with tribes choosing to implement federal environmental laws and programs to develop their capacity to administer environmental programs for their lands.

EPA, with its state, tribal, and local partners, ensures consistent and fair enforcement of federal environmental laws and regulations. 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. Through E-Enterprise for the Environment, EPA uses a shared governance approach, working with states and tribes, to modernize and streamline the implementation of our environmental programs. 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 look for cost-effective ways to enhance the compliance assurance tool box in collaboration with its state, tribal, local, federal, and industry partners. For example, the E-Enterprise Web Portal

offers a platform or gateway for making shared services available to states, tribes, and EPA to transact business. 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 tool box 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 to make programs more effective and efficient in promoting compliance and remedying violations. Some of the Agency's ongoing collaborative efforts with the Environmental Council of the States (ECOS)⁴ include producing webinars to identify new compliance approaches states and/or EPA could pilot and evaluate; increasing training availability; and preparing for advances in pollution monitoring technology.

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 ensures a level playing field exists for regulated entities across the country.

Another core element of EPA's compliance assurance program is providing timely and accessible compliance assistance information to the regulated community. The E-Enterprise Web Portal is one conduit for providing this type of information. In addition, EPA will continue partnering with third-party organizations and federal agencies to support the existing web-based, sector-specific compliance assistance centers⁵ and other web-based assistance resources. Also, 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, such as field inspections, electronic reporting, and data analysis tools, and where appropriate, follow-up enforcement actions on those programs not currently delegated or delegable to states and tribes, and in delegated or authorized state programs where the state lacks the resources, capacity, or will, to take appropriate action to protect public health and the environment. The Agency provides monitoring, program evaluations, and capacity building to support and complement authorized state, tribal, territorial and local government programs. The Agency also works collaboratively with states in resolving noncompliance at federal facilities, especially states lacking enforcement authorities or the capacity to address these issues. In FY 2020, 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

⁴ For more information on OECA's collaboration with ECOS via E-Enterprise, see <u>Article: Advanced</u> Monitoring Technology: Opportunities and Challenges. A Path Forward for EPA, States, and Tribes.

 $^{^5}$ For more information on compliance assistance centers, see $\underline{\text{https://www.epa.gov/compliance/compliance-}}$ assistance-centers.

their permit limits. 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 2019, EPA is piloting an interim policy on Inspection Report Timeliness and Standardization, including tracking of inspection report timeliness in the Integrated Compliance Information System (ICIS). The intent of this pilot is to ensure the timely production of reports and the timely completion and release of inspection reports, including any potential deficiencies or areas of concern, to facilities and the public. By the end of FY 2019, EPA will address any lessons learned and issue a final policy with full implementation in FY 2020.

In FY 2020, EPA requests \$90.6 million and 428.7 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 – for example, marine litter. Pollution impacts air, water, food crops, and food chains, and can accumulate in foods such as fish. In FY 2020, EPA will continue to engage both bilaterally and through multilateral institutions to improve international cooperation to prevent and address the transboundary movement of pollution. For example, EPA will engage with countries like China to address air pollution that contributes significant pollution to the domestic and international environment. The FY 2020 Budget includes \$5.3 million to support the International Sources of Pollution program. EPA efforts include working with international partners to strengthen environmental laws and governance to more closely align with U.S. standards and practices of U.S. industry.

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.⁶

EPA will strengthen its community-driven approach, which emphasizes public participation in partnering with states, tribes, and communities and maximizes the support and resources of the Agency to create tangible environmental results. 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. EPA will increase transparency with industry,

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⁶ As of April 2018, there were 2,537 overdue FOIA requests in the backlog. (Footnote updated from *FY 2018-2022 EPA Strategic Plan.*).

environmental groups and other stakeholders; and facilitate public participation, emphasizing cooperation and collaboration, especially at the early stages of Agency actions.

The Agency also will enhance coordination across its programs and with federal partners to ensure alignment of mutual efforts, including consideration of vulnerable groups and communities in decisions. The EPA will reflect community needs in its actions and investments, recognizing that the needs of rural communities may not be the same as in urban areas. Increasing transparency and public participation in EPA's work with other affected entities will enhance the Agency's ability to partner with states, tribes, and local governments and increase responsiveness to the needs of their most vulnerable communities. EPA will serve as a convener and leverage resources with new and existing partners to deliver services efficiently and effectively. The Agency will continue to engage with regulated entities to identify reforms to increase efficiency and effectiveness to meet the Nation's environmental goals.

EPA will meet community needs through more meaningful engagement and public participation and by building community capacity through grants, technical assistance, and partnering. The Agency will leverage recommendations provided by federal advisory committees, such as the National Environmental Justice Advisory Council (NEJAC), the Local Government Advisory Council (LGAC), and the Children's Health Protection Advisory Committee (CHPAC). The focus will be on partnerships representing vulnerable populations, such as youth, elderly, and low-income communities. In FY 2018, working with EPA, NEJAC finalized a report with recommendations for improving the financing of water infrastructure projects in low-income communities. These communities typically struggle to attain the resources, capacity and expertise to secure reliable clean sources of drinking water and wastewater systems. The SRFs are one example of how the Agency provides needed financing to such populations, particularly small and rural communities. In support of this aspect of EPA's work, we are requesting flexibility for subsidization of SRF loans to communities.

To further integrate and implement community environmental considerations within EPA programs, the Agency will create tools to facilitate incorporation of community understanding, needs, and concerns across program activities. The Agency will continue to support the Environmental Justice Collaborative Problem Solving cooperative agreement program to support community-based organizations, as well as Environmental Justice Technical Assistance for Communities to support the technical needs of low-income, minority and tribal/indigenous populations. They will also advance more systematic incorporation of existing tools and needs, such as use of the Environmental Justice Screening and Mapping Tool (EJSCREEN) and EnviroAtlas. EPA will develop a cross-Agency communities' team to lead regional involvement in and resourcing of community-based environmental work through a fully-integrated resource platform.

As part of our work to improve transparency, EPA continues to focus on improving the FOIA process. The complexity and volume of electronic documents required to be searched, collected, and reviewed has increased over time. The Agency will 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, sustainable manner.

In FY 2020, the Agency will work to coordinate across the federal government, and through EPA regional offices to partner with federal agencies in communities of focus to deliver services more efficiently and effectively. Such partnerships will leverage resources and expertise from across EPA and a range of outside partners to advance economic revitalization through the environmental and health goals of communities, leveraging expertise and resources where possible. The Agency will continue its leadership of and involvement in the Office of Management and Budget (OMB) Community Solutions Task Force to better access and leverage resources from across federal agencies. It will also strengthen coordination with the Interagency Working Group on Environmental Justice to better integrate EPA priorities and support and engage communities. 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 cooperative federalism that is more effective, responsive and collaborative in addressing the needs and challenges of our partners and communities.

In FY 2020, EPA requests \$2.7 million and 4.0 FTE to support this strategic objective.

Goal 3: Rule of Law and Process

Strategic Goal: Administer the law, as Congress intended, to refocus the Agency on its statutory obligations under the law

Rule of Law and Process	FY 2018 Enacted Budget	FY 2019 Annualized CR	FY 2020 President's Budget	Delta FY 2020 - FY 2019
3.1 - Compliance with the Law	\$403,350	\$403,350	\$382,124	(\$21,226)
3.2 - Create Consistency and Certainty	\$68,981	\$68,981	\$66,782	(\$2,199)
3.3 - Prioritize Robust Science	\$481,723	\$481,723	\$262,880	(\$218,843)
3.4 - Streamline and Modernize	\$37,583	\$37,583	\$28,670	(\$8,913)
3.5 - Improve Efficiency and Effectiveness	\$907,464	\$907,464	\$924,368	\$16,904
Goal 3 Total	\$1,899,101	\$1,899,101	\$1,664,824	(\$234,277)
Total Workyears	6,416.8	6,416.8	5,628.6	(788.2)

Note: Totals do not include proposed Agency-wide cancellation of funds.

Introduction

EPA will continue to reinvigorate the rule of law and process as it administers the environmental laws as Congress intended, and to refocus the Agency on its core statutory obligations. 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. EPA will continue to take civil or criminal enforcement action against violators of environmental laws.

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. One of EPA's highest priorities is to continue creating consistency and certainty for the regulated community. 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 will enforce the rule of law in a timely 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 industry, citizens and to ensure environmental protection. EPA continues to take a variety of efforts to ensure consistency in the application of laws and regulations, while respecting the unique circumstances of each state and tribe. 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. 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 2020,

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. Carrying out this goal requires that EPA improve the efficiency of its internal business and administrative operations. Streamlining EPA's business operations, in particular the permitting processes established by the different environmental statutes, is key to ensuring economic growth, human health, and environmental protection. 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 core mission work.

Agency Priority Goals

The Budget highlights EPA's FY 2018-2019 Agency Priority Goals that advance EPA priorities and the *FY 2018-2022 EPA Strategic Plan*. Two of the six APGs support Goal 3:

- 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 with their permit limits to 21% from a baseline of 24%.
- Accelerate permitting-related decisions. By September 30, 2019, EPA will reduce by 50% the number of permitting-related decisions that exceed six months.

FY 2020 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*:

- By September 30, 2022, reduce the average time from violation identification to correction.
- By September 30, 2022, increase the environmental law compliance rate.²

¹ For EPA's APG Action Plans and Quarterly Updates, see https://www.performance.gov/EPA/

² 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. The baseline and targets will be determined in FY 2019. 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.*)

For decades, the protections mandated by federal environmental laws have been essential to the growth of American prosperity. Noncompliance with those laws diminishes shared prosperity and unfairly tilts the field of economic competition in favor of those that skirt the law. 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. In all of its work, 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.

In FY 2020, EPA's Superfund enforcement priorities remain focused on addressing the most significant violations consistent with EPA's statutory authorities. In states with authorized programs, EPA and states share enforcement responsibility, with primary enforcement responsibility residing with the state. However, EPA is responsible for addressing violations: (1) in programs that are not delegable to a state or a federally-recognized tribe; or (2) where the state or tribe has not been authorized to implement a delegable program.

Even in states or tribes authorized to implement a program, EPA often serves a critical role as a backstop for instances when a state or tribe does not timely or appropriately address serious noncompliance. EPA also may assist a state or tribe in remedying noncompliance problems when the state or tribe is unable to address the problem because it lacks the capability, resources, or will, such as actions against other federal or state agencies or violations that affect multiple states. For some violations, the Agency and states or tribes may decide that the best approach is a joint enforcement action. Further, EPA will take immediate action when there is an environmental emergency, such as an oil spill or chemical accident.

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 CWA program. 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 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 2020, 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. EPA requests \$150.5 million and 857.1 FTE for the Civil Enforcement program in FY 2020.

EPA recognizes that 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 efforts toward areas where, in support of the Agency's Strategic Plan, EPA's enforcement actions address significant noncompliance issues and where enforcement can address the most substantial impacts to human health and the environment. EPA also recognizes the role of states and tribes as the primary implementers of federal statutes where authorized by EPA, and 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 particular 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 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, the CWA, and stratospheric ozone under the CAA are non-delegable. EPA also will pursue enforcement actions at federal facilities where significant violations are discovered; will 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.

EPA intends to evolve the National Enforcement Initiatives program into a National Compliance Initiatives (NCI) program by providing states and tribes with additional opportunities for meaningful engagement, by developing and applying a broader set of compliance assurance tools, and by aligning the priorities with the FY 2018 - 2022 EPA Strategic Plan. Implementation of this NCI cycle will begin in FY 2020 and continue through FY 2023.

In FY 2020, EPA will analyze the rate of significant non-compliance (SNC) with NPDES program requirements quarterly to assess progress with EPA's goal of reducing the SNC rate. EPA will identify focus areas to achieve reductions, and the program will conduct its annual review of the electronic reporting participation rate for each authorized NPDES program and for each NPDES group as appropriate. This work supports the Agency Priority Goal to increase the environmental law compliance rate and reduce the percentage of Clean Water Act NPDES permittees in significant noncompliance.

Criminal Enforcement

In FY 2020, EPA requests \$52.8 million to support the Criminal Enforcement program. 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 will collaborate and coordinate with the U.S. Department of Justice and state, tribal, and local law enforcement counterparts to ensure the Agency responds to violations as quickly and effectively as possible. EPA enforces the nation's environmental laws through targeted investigation of criminal conduct committed by individual and corporate defendants that threatens human health and the environment. EPA's criminal enforcement program plays a critical role across the country since states and tribes have limited capacity to prosecute for

environmental crimes. The Agency will focus resources on the most egregious environmental cases that present significant human health and environmental impacts.

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 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 by 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 2018, the Superfund Enforcement program secured private party commitments totaling \$613 million. The use of Superfund enforcement tools this year resulted in cleanup and redevelopment at 150 private party sites.

In FY 2020, EPA will focus its resources on the highest priority sites, particularly those that may present an immediate risk to human health or the environment. In accordance with the Superfund Task Force recommendations, the Agency will 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. At federally-owned sites, EPA also will focus on resolving formal disputes under the federal facility agreements and implementing the Superfund Task Force recommendations. In FY 2020, EPA requests \$155.1 million and 745.3 FTE to fund the Superfund Enforcement program and \$7.0 million to fund the Federal Facilities Enforcement program.

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.³
- By September 30, 2022, eliminate unnecessary or duplicative reporting burdens to the regulated community by 10,000,000 hours.⁴

The environmental regulatory framework is inherently dynamic. 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 must also meet another key responsibility – minimizing "regulatory uncertainty" that unnecessarily causes businesses and communities to face delays, planning inefficiencies, and compliance complexities that impede environmental protection and economic

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³ Baseline will be determined in FY 2019. (No footnote in FY 2018-2022 EPA Strategic Plan.)

⁴ Baseline is estimated at 173,849,665 information collection and reporting hours.

growth and development. 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 cooperative federalism and commitment to the rule of law, also will help advance Agency goals for streamlining and modernizing permitting and enhancing shared accountability. In total, EPA requests \$66.8 million in resources to support this objective.

As EPA issues new or revised regulations, businesses and individuals can find it challenging to know which rules apply to them and to adjust their compliance strategies. EPA will reinvigorate 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 addition, 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. In FY 2020, the base catalog and subsequent updates will be completed. This will provide a foundation for better coordination at headquarters and regions. It also will support EPA cooperative federalism commitments aimed at minimizing duplication and overlap among regional offices, headquarters, states, and tribes. This effort also leverages another commitment EPA is making under cooperative federalism—to identify for all environmental media an inventory and timeline for state-led permits that EPA reviews.

The Agency will establish a national network to ensure consistent implementation of policy. EPA will review regulatory guidance documents to identify key opportunities and will clarify and realign Agency approaches to improve consistency and clarity. EPA will strengthen working relationships with states, tribes, and local communities to transfer knowledge, leveraging its commitments under cooperative federalism, such as the collaboration under E-Enterprise for the Environment. EPA will make available to states and tribes tools and services designed by other federal agencies, states, tribes, or local communities that enhance efficiency, reduce burden on the regulated community, while ensuring protection of human health and the environment.

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.⁵

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 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's program and regional offices as well as state and tribal partners. Specifically, the Agency will strengthen alignment of its research to support EPA programs, regions, 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. Working closely with ECOS and its subsidiary, the Environmental Research Institute of the States (ERIS).8 the Agency will strive to connect state research needs with Agency priorities, and work to improve communication of research results. Through the public-private coalition Interstate Technology and Regulatory Council, 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.

EPA research will be reviewed by various scientific advisory boards (e.g., Board of Scientific Counselors¹⁰) made up of recognized experts in various scientific, engineering, and social science fields from industry; business; public and private research institutes or organizations; academia; federal, state, tribal, and local governments; nongovernmental organizations; and other relevant interest areas.

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. The results of Agency research to support air quality program priorities will inform EPA programs; state, tribal, and local air programs; 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. For example, the Air and Energy Research Program is addressing nitrogen and co-pollutant loadings to watersheds via atmospheric

⁵ Measure text updated from "By September 30, 2022, increase the number of research products meeting customer needs" as noted in the FY 2020 APP Table (Footnote updated from *FY 2018-2022 EPA Strategic Plan*).

⁶ For more information: https://www.epa.gov/research/strategic-research-action-plans-2016-2019

⁷ For more information on EPA's research go to https://www.epa.gov/aboutepa/about-office-research-and-development-ord

⁸ For more information please go to: https://www.ecos.org/eris/

⁹ For more information on the Interstate Technology and Regulatory Council, go to https://www.itrcweb.org/

¹⁰ Please see https://www.epa.gov/bosc

¹¹ For more information on EPA's Air Research program go to https://www.epa.gov/air-research

deposition, as well as optimizing approaches to reduce health and risk from uncontrolled wildfires. EPA requests \$31.7 million in FY 2020 to conduct air quality research.

Safe and Sustainable Water Resources

In FY 2020, EPA requests \$70 million for the Safe and Sustainable Water Resources Program. EPA will develop innovative, cost-effective solutions to current, emerging, and long-term water resource challenges for complex chemical and biological contaminants. 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 regions and states that can be used to make informed decisions about managing PFAS. Examples of research include improving methods for rapid and cost-effective monitoring of waterborne pathogens in recreational waters and investigating the health impacts from exposure to harmful algal/cyanobacteria toxins, and developing innovative methods to monitor, characterize, and predict blooms for early action.

Sustainable and Healthy Communities

EPA requests \$65.5 million in FY 2020 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. The Agency conducts health, environmental engineering, and ecological research and prepares planning and analysis tools for localities nationwide to use in facilitating regulatory compliance and improving environmental and health outcomes. 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. Finally, 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, and site engineering challenges related to PFAS.

Chemical Safety

EPA requests \$63.9 million in FY 2020 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.¹⁵

¹² For more information on EPA's Water Research go to https://www.epa.gov/water-research

¹³ For more information please go to https://www.epa.gov/land-research

¹⁴ For more information please go to https://www.epa.gov/eco-research and https://www.epa.gov/healthresearch

¹⁵ Please see https://www.epa.gov/chemical-research

In June 2018, EPA released a TSCA Alternative Toxicity Testing Strategy Document¹⁶. This strategic plan, developed jointly by the Chemical Safety research program and the Office of Chemical Safety and Pollution Prevention, promotes development and implementation of test methods within the TSCA program that are better, faster, less expensive, and reduce the need for animal use.

Human Health Risk Assessment

EPA requests \$28 million in FY 2020 to support the Human Health Risk Assessment Research program, including the Superfund transfer. EPA will focus on the science of assessments that inform Agency, state, and tribal decisions and policies. 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. Integrated Risk Information System (IRIS) human health assessments are used by EPA and other health agencies to inform national standards, clean-up 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.

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 6 months. 18

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 2020, EPA requests a total of \$28.7 million in support of this strategic objective.

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, to improve efficiencies in all permitting processes and meet our commitments. The Agency will work with states and use Lean techniques to streamline the review

¹⁶ https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/alternative-test-methods-and-strategies-reduce

¹⁷ Please see https://www.epa.gov/risk/human-health-risk-assessment

¹⁸ Baseline and FY 2020 target will be determined in FY 2019. (No footnote in FY 2018-2022 EPA Strategic Plan.)

of state-issued permits. EPA will modernize permitting and reporting processes through efforts such as E-Enterprise for the Environment, a shared governance model with EPA, states, and tribes. EPA will work with states and tribes to achieve this objective without overburdening those entities with costly unnecessary reporting systems and technology.

EPA also will consider where policy changes can improve permitting efficiency without sacrificing environmental results. Examples include expanding the scope of minor permit modifications to reduce the number of permit reviews required, reinvigorating the use of plantwide applicability limits (PALs) to reduce unnecessary permitting transactions, and increasing states' ability to incorporate federal regulations by reference, enabling them to adjust quickly and efficiently to new regulatory provisions.

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 2020, EPA will 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. 19
- By September 30, 2022, reduce procurement processing times by achieving 100% of procurement action lead times (PALT).²⁰
- By September 30, 2022, improve 250 operational processes.
- By September 30, 2022, increase enterprise adoption of shared services by four. 21

Process Improvements

To better support the core mission to protect human health and the environment, EPA will improve the efficiency and effectiveness of its business processes. Focus areas will include financial, facility, human resource, contract, grant, and information technology (IT)/information management (IM). Enhancements will take advantage of new collaborative and cost-effective tools and technologies. The Agency will build a modern and secure work environment that will protect critical information and support its efforts to address the environmental problems of the 21st century. EPA will modernize and improve business processes and operations to promote

²⁰ Baseline, as of September 30, 2018 is 77% for all contract actions awarded within PALT. (Footnote updated from *FY 2018-2022 EPA Strategic Plan.*)

¹⁹ Baseline is 5,264,846 square feet as of FY 2017.

²¹ Baseline is five administrative systems/operations shared services in FY 2017.

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 also 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 \$924.4 million in FY 2020.

EPA will 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. To improve the efficiency and cost effectiveness of its operations, EPA will standardize and streamline internal business processes in its acquisition, financial management, and grants processes and systems and explore additional federal and/or internal shared services. When EPA applied ELMS to processes across the Agency, process times were reduced by 50 percent on average for those processes.

EPA will ensure its workforce is positioned to accomplish the Agency's mission effectively by providing access to quality training and development opportunities for employees and supervisors to improve their skills, knowledge, and performance. EPA will improve its workforce planning and management, strengthen its Senior Executive Service, and focus on developing and maintaining a highly-skilled technical workforce.

Cybersecurity

To ensure that critical environmental and human health information is adequately protected, 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 via 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

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 – a critical resource in protecting human health and the environment – EPA will improve its IT/IM capabilities and customer experiences.

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.

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 our 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. 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 extensive information resources by designing an enterprise-wide information architecture that will facilitate the electronic management of data and information, as well as multimodal access, effective searching, and ease of use. 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.

Appendices

Environmental Protection Agency FY 2020 Annual Performance Plan and Congressional Justification

PROGRAM PROJECTS BY PROGRAM AREA

(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Science & Technology				
Clean Air				
Clean Air Allowance Trading Programs	\$7,543.1	\$7,569.0	\$5,739.0	-\$1,830.0
Atmospheric Protection Program	\$8,572.7	\$8,018.0	\$0.0	-\$8,018.0
Federal Support for Air Quality Management	\$5,722.3	\$6,714.0	\$3,776.0	-\$2,938.0
Federal Vehicle and Fuels Standards and Certification	\$90,650.1	\$94,240.0	\$77,826.0	-\$16,414.0
Subtotal, Clean Air	\$112,488.2	\$116,541.0	\$87,341.0	-\$29,200.0
Indoor Air and Radiation				
Indoor Air: Radon Program	\$133.5	\$159.0	\$0.0	-\$159.0
Radiation: Protection	\$2,407.4	\$2,246.0	\$990.0	-\$1,256.0
Radiation: Response Preparedness	\$3,259.5	\$3,266.0	\$3,793.0	\$527.0
Reduce Risks from Indoor Air	\$40.0	\$326.0	\$0.0	-\$326.0
Subtotal, Indoor Air and Radiation	\$5,840.4	\$5,997.0	\$4,783.0	-\$1,214.0
Enforcement				
Forensics Support	\$12,016.5	\$13,669.0	\$10,883.0	-\$2,786.0
Homeland Security				
Homeland Security: Critical Infrastructure Protection	\$9,504.5	\$9,788.0	\$7,457.0	-\$2,331.0
Homeland Security: Preparedness, Response, and Recovery	\$22,767.3	\$22,918.0	\$24,847.0	\$1,929.0
Homeland Security: Protection of EPA Personnel and Infrastructure	\$415.0	\$416.0	\$500.0	\$84.0
Subtotal, Homeland Security	\$32,686.8	\$33,122.0	\$32,804.0	-\$318.0
IT / Data Management / Security				
IT / Data Management	\$2,296.0	\$3,089.0	\$2,747.0	-\$342.0
Operations and Administration				
Facilities Infrastructure and Operations	\$70,101.6	\$68,339.0	\$67,274.0	-\$1,065.0
Workforce Reshaping	\$0.0	\$0.0	\$5,994.0	\$5,994.0
Subtotal, Operations and Administration	\$70,101.6	\$68,339.0	\$73,268.0	\$4,929.0
Pesticides Licensing				
Pesticides: Protect Human Health from Pesticide Risk	\$2,888.3	\$2,531.0	\$2,401.0	-\$130.0
Pesticides: Protect the Environment from Pesticide Risk	\$2,309.7	\$3,072.0	\$2,257.0	-\$815.0

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Pesticides: Realize the Value of Pesticide Availability	\$362.0	\$424.0	\$615.0	\$191.0
Subtotal, Pesticides Licensing	\$5,560.0	\$6,027.0	\$5,273.0	-\$754.0
Research: Air and Energy				
Research: Air and Energy	\$87,503.9	\$91,906.0	\$31,707.0	-\$60,199.0
Research: Safe and Sustainable Water Resources				
Research: Safe and Sustainable Water Resources	\$104,163.5	\$106,257.0	\$69,963.0	-\$36,294.0
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	\$131,757.3	\$134,327.0	\$53,631.0	-\$80,696.0
Research: Chemical Safety and Sustainability				
Human Health Risk Assessment	\$33,568.7	\$36,523.0	\$22,689.0	-\$13,834.0
Research: Chemical Safety and Sustainability				
Endocrine Disruptors	\$12,501.0	\$16,253.0	\$10,346.0	-\$5,907.0
Computational Toxicology	\$21,153.1	\$21,409.0	\$17,630.0	-\$3,779.0
Research: Chemical Safety and Sustainability (other activities)	\$45,933.8	\$52,745.0	\$35,901.0	-\$16,844.0
Subtotal, Research: Chemical Safety and Sustainability	\$79,587.9	\$90,407.0	\$63,877.0	-\$26,530.0
Subtotal, Research: Chemical Safety and Sustainability	\$113,156.6	\$126,930.0	\$86,566.0	-\$40,364.0
Water: Human Health Protection				
Drinking Water Programs	\$3,458.2	\$3,519.0	\$4,094.0	\$575.0
Congressional Priorities				
Water Quality Research and Support Grants	\$4,094.0	\$4,100.0	\$0.0	-\$4,100.0
Total, Science & Technology	\$685,123.0	\$713,823.0	\$463,060.0	-\$250,763.0
Environmental Program & Management				
Clean Air				
Clean Air Allowance Trading Programs	\$14,720.4	\$15,270.0	\$13,292.0	-\$1,978.0
Atmospheric Protection Program	\$92,753.7	\$95,436.0	\$13,965.0	-\$81,471.0
Federal Stationary Source Regulations	\$19,618.3	\$21,028.0	\$17,311.0	-\$3,717.0
Federal Support for Air Quality Management	\$128,588.0	\$128,001.0	\$107,298.0	-\$20,703.0
Stratospheric Ozone: Domestic Programs	\$4,601.1	\$4,637.0	\$3,948.0	-\$689.0
Stratospheric Ozone: Multilateral Fund	\$8,326.0	\$8,736.0	\$0.0	-\$8,736.0
Subtotal, Clean Air	\$268,607.5	\$273,108.0	\$155,814.0	-\$117,294.0
Indoor Air and Radiation				
Indoor Air: Radon Program	\$2,575.1	\$3,136.0	\$0.0	-\$3,136.0

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Radiation: Protection	\$9,286.8	\$9,180.0	\$2,307.0	-\$6,873.0
Radiation: Response Preparedness	\$1,774.5	\$1,952.0	\$2,219.0	\$267.0
Reduce Risks from Indoor Air	\$13,489.6	\$13,369.0	\$0.0	-\$13,369.0
Subtotal, Indoor Air and Radiation	\$27,126.0	\$27,637.0	\$4,526.0	-\$23,111.0
Brownfields				
Brownfields	\$24,175.6	\$25,593.0	\$16,728.0	-\$8,865.0
Compliance				
Compliance Monitoring	\$101,299.2	\$101,665.0	\$89,644.0	-\$12,021.0
Enforcement				
Civil Enforcement	\$164,266.9	\$171,283.0	\$147,647.0	-\$23,636.0
Criminal Enforcement	\$44,334.2	\$44,995.0	\$44,582.0	-\$413.0
Environmental Justice	\$6,436.5	\$6,737.0	\$2,739.0	-\$3,998.0
NEPA Implementation	\$15,751.2	\$17,622.0	\$16,598.0	-\$1,024.0
Subtotal, Enforcement	\$230,788.8	\$240,637.0	\$211,566.0	-\$29,071.0
Geographic Programs				
Geographic Program: Chesapeake Bay	\$67,542.4	\$73,000.0	\$7,300.0	-\$65,700.0
Geographic Program: Gulf of Mexico	\$9,122.9	\$12,542.0	\$0.0	-\$12,542.0
Geographic Program: Lake Champlain	\$8,395.0	\$8,399.0	\$0.0	-\$8,399.0
Geographic Program: Long Island Sound	\$11,753.9	\$12,000.0	\$0.0	-\$12,000.0
Geographic Program: Other				
Lake Pontchartrain	\$947.0	\$948.0	\$0.0	-\$948.0
S.New England Estuary (SNEE)	\$4,934.5	\$5,000.0	\$0.0	-\$5,000.0
Geographic Program: Other (other activities)	\$1,507.4	\$1,445.0	\$0.0	-\$1,445.0
Subtotal, Geographic Program: Other	\$7,388.9	\$7,393.0	\$0.0	-\$7,393.0
Great Lakes Restoration	\$307,739.4	\$300,000.0	\$30,000.0	-\$270,000.0
Geographic Program: South Florida	\$1,674.5	\$1,704.0	\$0.0	-\$1,704.0
Geographic Program: San Francisco Bay	\$1,763.7	\$4,819.0	\$0.0	-\$4,819.0
Geographic Program: Puget Sound	\$27,961.9	\$28,000.0	\$0.0	-\$28,000.0
Subtotal, Geographic Programs	\$443,342.6	\$447,857.0	\$37,300.0	-\$410,557.0
Homeland Security				
Homeland Security: Communication and Information	\$4,471.8	\$3,910.0	\$3,514.0	-\$396.0
Homeland Security: Critical Infrastructure Protection	\$908.7	\$880.0	\$1,188.0	\$308.0
Homeland Security: Protection of EPA Personnel and Infrastructure	\$5,400.2	\$5,405.0	\$4,986.0	-\$419.0

Information Exchange / Outreach

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
State and Local Prevention and Preparedness	\$14,799.1	\$14,760.0	\$10,524.0	-\$4,236.0
TRI / Right to Know	\$13,796.8	\$12,783.0	\$7,811.0	-\$4,972.0
Tribal - Capacity Building	\$13,979.6	\$14,547.0	\$13,201.0	-\$1,346.0
Executive Management and Operations	\$49,458.4	\$49,842.0	\$41,771.0	-\$8,071.0
Environmental Education	\$10,223.4	\$8,702.0	\$0.0	-\$8,702.0
Exchange Network	\$17,432.4	\$15,956.0	\$12,127.0	-\$3,829.0
Small Minority Business Assistance	\$1,598.1	\$1,574.0	\$0.0	-\$1,574.0
Small Business Ombudsman	\$1,799.8	\$1,826.0	\$1,918.0	\$92.0
Children and Other Sensitive Populations: Agency Coordination	\$6,496.0	\$6,548.0	\$2,545.0	-\$4,003.0
Subtotal, Information Exchange / Outreach	\$129,583.6	\$126,538.0	\$89,897.0	-\$36,641.0
International Programs				
US Mexico Border	\$2,645.5	\$3,033.0	\$0.0	-\$3,033.0
International Sources of Pollution	\$6,619.8	\$6,904.0	\$5,339.0	-\$1,565.0
Trade and Governance	\$5,290.1	\$5,463.0	\$0.0	-\$5,463.0
Subtotal, International Programs	\$14,555.4	\$15,400.0	\$5,339.0	-\$10,061.0
IT / Data Management / Security				
Information Security	\$7,016.5	\$7,280.0	\$13,773.0	\$6,493.0
IT / Data Management	\$84,464.5	\$83,256.0	\$71,117.0	-\$12,139.0
Subtotal, IT / Data Management / Security	\$91,481.0	\$90,536.0	\$84,890.0	-\$5,646.0
Legal / Science / Regulatory / Economic Review				
Integrated Environmental Strategies	\$9,529.8	\$10,653.0	\$8,828.0	-\$1,825.0
Administrative Law	\$4,706.5	\$4,753.0	\$4,812.0	\$59.0
Alternative Dispute Resolution	\$1,155.7	\$1,150.0	\$0.0	-\$1,150.0
Civil Rights Program	\$8,848.2	\$9,335.0	\$9,003.0	-\$332.0
Legal Advice: Environmental Program	\$51,344.3	\$50,886.0	\$48,123.0	-\$2,763.0
Legal Advice: Support Program	\$14,616.0	\$15,455.0	\$17,151.0	\$1,696.0
Regional Science and Technology	\$1,094.6	\$1,205.0	\$0.0	-\$1,205.0
Science Advisory Board	\$3,531.8	\$3,787.0	\$3,763.0	-\$24.0
Regulatory/Economic-Management and Analysis	\$14,270.7	\$14,190.0	\$16,162.0	\$1,972.0
Subtotal, Legal / Science / Regulatory / Economic Review	\$109,097.6	\$111,414.0	\$107,842.0	-\$3,572.0
Operations and Administration				
Central Planning, Budgeting, and Finance	\$70,053.3	\$72,884.0	\$71,100.0	-\$1,784.0
Facilities Infrastructure and Operations	\$292,535.1	\$308,701.0	\$308,335.0	-\$366.0
Acquisition Management	\$27,441.3	\$30,210.0	\$28,032.0	-\$2,178.0
Human Resources Management	\$43,220.4	\$44,227.0	\$41,635.0	-\$2,592.0
Financial Assistance Grants / IAG Management	\$24,462.0	\$24,729.0	\$20,202.0	-\$4,527.0
Workforce Reshaping	\$0.0	\$0.0	\$25,003.0	\$25,003.0

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Subtotal, Operations and Administration	\$457,712.1	\$480,751.0	\$494,307.0	\$13,556.0
Pesticides Licensing				
Science Policy and Biotechnology	\$1,604.1	\$2,040.0	\$0.0	-\$2,040.0
Pesticides: Protect Human Health from Pesticide Risk	\$56,288.2	\$58,016.0	\$49,440.0	-\$8,576.0
Pesticides: Protect the Environment from Pesticide Risk	\$38,380.7	\$41,081.0	\$30,668.0	-\$10,413.0
Pesticides: Realize the Value of Pesticide Availability	\$7,004.6	\$8,226.0	\$5,571.0	-\$2,655.0
Subtotal, Pesticides Licensing	\$103,277.6	\$109,363.0	\$85,679.0	-\$23,684.0
Research: Chemical Safety and Sustainability				
Research: Chemical Safety and Sustainability	\$328.4	\$0.0	\$0.0	\$0.0
Resource Conservation and Recovery Act (RCRA)				
RCRA: Corrective Action	\$37,118.1	\$39,052.0	\$33,202.0	-\$5,850.0
RCRA: Waste Management	\$58,434.1	\$60,791.0	\$46,813.0	-\$13,978.0
RCRA: Waste Minimization & Recycling	\$6,782.4	\$9,534.0	\$0.0	-\$9,534.0
Subtotal, Resource Conservation and Recovery Act (RCRA)	\$102,334.6	\$109,377.0	\$80,015.0	-\$29,362.0
Toxics Risk Review and Prevention				
Endocrine Disruptors	\$4,583.1	\$7,553.0	\$0.0	-\$7,553.0
Pollution Prevention Program	\$10,353.0	\$11,236.0	\$0.0	-\$11,236.0
Toxic Substances: Chemical Risk Review and Reduction	\$65,947.8	\$61,105.0	\$66,418.0	\$5,313.0
Toxic Substances: Lead Risk Reduction Program	\$12,523.5	\$12,627.0	\$0.0	-\$12,627.0
Subtotal, Toxics Risk Review and Prevention	\$93,407.4	\$92,521.0	\$66,418.0	-\$26,103.0
Underground Storage Tanks (LUST / UST)				
LUST / UST	\$10,812.6	\$11,295.0	\$5,996.0	-\$5,299.0
Water: Ecosystems				
National Estuary Program / Coastal Waterways	\$25,187.6	\$26,723.0	\$0.0	-\$26,723.0
Wetlands	\$18,528.7	\$21,065.0	\$21,578.0	\$513.0
Subtotal, Water: Ecosystems	\$43,716.3	\$47,788.0	\$21,578.0	-\$26,210.0
Water: Human Health Protection				
Beach / Fish Programs	\$1,777.0	\$2,014.0	\$0.0	-\$2,014.0
Drinking Water Programs	\$91,494.4	\$96,493.0	\$89,808.0	-\$6,685.0
Subtotal, Water: Human Health Protection	\$93,271.4	\$98,507.0	\$89,808.0	-\$8,699.0
Water Quality Protection				
Marine Pollution	\$10,242.6	\$11,065.0	\$0.0	-\$11,065.0
Surface Water Protection	\$192,705.9	\$199,352.0	\$188,233.0	-\$11,119.0
Subtotal, Water Quality Protection	\$202,948.5	\$210,417.0	\$188,233.0	-\$22,184.0

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Congressional Priorities				
Water Quality Research and Support Grants	\$25,400.0	\$12,700.0	\$0.0	-\$12,700.0
Total, Environmental Program & Management	\$2,584,046.9	\$2,643,299.0	\$1,845,268.0	-\$798,031.0
Inspector General				
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	\$40,328.4	\$41,489.0	\$38,893.0	-\$2,596.0
Total, Inspector General	\$40,328.4	\$41,489.0	\$38,893.0	-\$2,596.0
Building and Facilities				
Homeland Security				
Homeland Security: Protection of EPA Personnel and Infrastructure	\$5,921.7	\$6,676.0	\$6,176.0	-\$500.0
Operations and Administration				
Facilities Infrastructure and Operations	\$34,605.1	\$27,791.0	\$33,377.0	\$5,586.0
Total, Building and Facilities	\$40,526.8	\$34,467.0	\$39,553.0	\$5,086.0
Hazardous Substance Superfund				
Indoor Air and Radiation				
Radiation: Protection	\$2,176.9	\$1,985.0	\$1,933.0	-\$52.0
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	\$9,159.7	\$8,778.0	\$9,586.0	\$808.0
Compliance				
Compliance Monitoring	\$943.0	\$995.0	\$991.0	-\$4.0
Enforcement				
Criminal Enforcement	\$7,336.3	\$7,502.0	\$8,198.0	\$696.0
Environmental Justice	\$617.0	\$758.0	\$0.0	-\$758.0
Forensics Support	\$1,999.6	\$1,824.0	\$1,144.0	-\$680.0
Superfund: Enforcement	\$151,915.5	\$150,048.0	\$155,059.0	\$5,011.0
Superfund: Federal Facilities Enforcement	\$5,810.9	\$6,243.0	\$6,956.0	\$713.0
Subtotal, Enforcement	\$167,679.3	\$166,375.0	\$171,357.0	\$4,982.0
Homeland Security				
Homeland Security: Preparedness, Response, and Recovery	\$31,102.4	\$31,648.0	\$31,054.0	-\$594.0

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Homeland Security: Protection of EPA Personnel and Infrastructure	\$1,325.5	\$968.0	\$915.0	-\$53.0
Subtotal, Homeland Security	\$32,427.9	\$32,616.0	\$31,969.0	-\$647.0
Information Exchange / Outreach				
Exchange Network	\$1,328.6	\$1,328.0	\$1,293.0	-\$35.0
IT / Data Management / Security				
Information Security	\$745.8	\$661.0	\$5,082.0	\$4,421.0
IT / Data Management	\$14,126.0	\$13,824.0	\$13,443.0	-\$381.0
Subtotal, IT / Data Management / Security	\$14,871.8	\$14,485.0	\$18,525.0	\$4,040.0
Legal / Science / Regulatory / Economic Review				
Alternative Dispute Resolution	\$744.3	\$748.0	\$0.0	-\$748.0
Legal Advice: Environmental Program	\$914.1	\$505.0	\$579.0	\$74.0
Civil Rights Program	\$60.0	\$0.0	\$0.0	\$0.0
Subtotal, Legal / Science / Regulatory / Economic Review	\$1,718.4	\$1,253.0	\$579.0	-\$674.0
Operations and Administration				
Central Planning, Budgeting, and Finance	\$20,503.7	\$22,018.0	\$21,340.0	-\$678.0
Facilities Infrastructure and Operations	\$76,061.2	\$75,253.0	\$73,540.0	-\$1,713.0
Acquisition Management	\$20,477.3	\$21,183.0	\$21,541.0	\$358.0
Human Resources Management	\$6,279.4	\$7,044.0	\$5,444.0	-\$1,600.0
Financial Assistance Grants / IAG Management	\$2,498.6	\$2,607.0	\$2,655.0	\$48.0
Subtotal, Operations and Administration	\$125,820.2	\$128,105.0	\$124,520.0	-\$3,585.0
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	\$11,023.3	\$11,463.0	\$10,977.0	-\$486.0
Research: Chemical Safety and Sustainability				
Human Health Risk Assessment	\$2,822.9	\$2,824.0	\$5,338.0	\$2,514.0
Superfund Cleanup				
Superfund: Emergency Response and Removal	\$200,491.4	\$189,917.0	\$168,370.0	-\$21,547.0
Superfund: EPA Emergency Preparedness	\$7,744.0	\$7,636.0	\$7,396.0	-\$240.0
Superfund: Federal Facilities	\$21,300.3	\$21,125.0	\$20,465.0	-\$660.0
Superfund: Remedial	\$607,626.1	\$566,062.0	\$472,052.0	-\$94,010.0
Subtotal, Superfund Cleanup	\$837,161.8	\$784,740.0	\$668,283.0	-\$116,457.0
Total, Hazardous Substance Superfund	\$1,207,133.8	\$1,154,947.0	\$1,045,351.0	-\$109,596.0

Leaking Underground Storage Tanks

Enforcement

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Civil Enforcement	\$619.8	\$620.0	\$470.0	-\$150.0
Operations and Administration				
Central Planning, Budgeting, and Finance	\$390.3	\$387.0	\$434.0	\$47.0
Facilities Infrastructure and Operations	\$1,056.6	\$813.0	\$773.0	-\$40.0
Acquisition Management	\$6.5	\$152.0	\$138.0	-\$14.0
Subtotal, Operations and Administration	\$1,453.4	\$1,352.0	\$1,345.0	-\$7.0
Underground Storage Tanks (LUST / UST)				
LUST / UST	\$9,731.5	\$9,240.0	\$6,722.0	-\$2,518.0
LUST Cooperative Agreements	\$58,088.1	\$55,040.0	\$38,840.0	-\$16,200.0
LUST Prevention	\$24,233.5	\$25,369.0	\$0.0	-\$25,369.0
Subtotal, Underground Storage Tanks (LUST / UST)	\$92,053.1	\$89,649.0	\$45,562.0	-\$44,087.0
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	\$311.3	\$320.0	\$424.0	\$104.0
Total, Leaking Underground Storage Tanks	\$94,437.6	\$91,941.0	\$47,801.0	-\$44,140.0
Inland Oil Spill Programs				
Compliance				
Compliance Monitoring	\$122.5	\$139.0	\$0.0	-\$139.0
Enforcement				
Civil Enforcement	\$2,464.8	\$2,413.0	\$2,373.0	-\$40.0
Oil				
Oil Spill: Prevention, Preparedness and Response	\$14,690.3	\$14,409.0	\$12,413.0	-\$1,996.0
Operations and Administration				
Facilities Infrastructure and Operations	\$753.8	\$584.0	\$665.0	\$81.0
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	\$695.6	\$664.0	\$511.0	-\$153.0
Total, Inland Oil Spill Programs	\$18,727.0	\$18,209.0	\$15,962.0	-\$2,247.0
State and Tribal Assistance Grants				
State and Tribal Assistance Grants (STAG)				
Infrastructure Assistance: Alaska Native Villages	\$19,543.0	\$20,000.0	\$3,000.0	-\$17,000.0
Brownfields Projects	\$84,310.3	\$80,000.0	\$62,000.0	-\$18,000.0
Infrastructure Assistance: Clean Water SRF	\$1,657,428.2	\$1,693,887.0	\$1,119,772.0	-\$574,115.0
Infrastructure Assistance: Drinking Water SRF	\$1,128,161.0	\$1,163,233.0	\$863,233.0	-\$300,000.0

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Infrastructure Assistance: Mexico Border	\$11,524.6	\$10,000.0	\$0.0	-\$10,000.0
Diesel Emissions Reduction Grant Program	\$72,668.1	\$75,000.0	\$10,000.0	-\$65,000.0
Targeted Airshed Grants	\$29,479.0	\$40,000.0	\$0.0	-\$40,000.0
GKM Water Monitoring	\$3,092.6	\$4,000.0	\$0.0	-\$4,000.0
Safe Water for Small & Disadvantaged Communities	\$0.0	\$20,000.0	\$0.0	-\$20,000.0
Reducing Lead in Drinking Water	\$0.0	\$10,000.0	\$0.0	-\$10,000.0
Lead Testing in Schools	\$0.0	\$20,000.0	\$10,000.0	-\$10,000.0
Healthy Schools	\$0.0	\$0.0	\$50,000.0	\$50,000.0
Drinking Water Infrastructure Resilience and Sustainability	\$0.0	\$0.0	\$2,000.0	\$2,000.0
Drinking Fountain Lead Testing	\$0.0	\$0.0	\$5,000.0	\$5,000.0
Technical Assistance for Treatment Works	\$0.0	\$0.0	\$7,500.0	\$7,500.0
Sewer Overflow Control Grants	\$0.0	\$0.0	\$61,450.0	\$61,450.0
Water Infrastructure and Workforce Investment	\$0.0	\$0.0	\$300.0	\$300.0
Subtotal, State and Tribal Assistance Grants (STAG)	\$3,006,206.8	\$3,136,120.0	\$2,194,255.0	-\$941,865.0
Catagoria Count				
Categorical Grants Name of Source (See 210)	¢167.502.9	¢170.015.0	\$0.0	¢170.015.0
Categorical Grant: Nonpoint Source (Sec. 319) Categorical Grant: Public Water System Supervision	\$167,592.8	\$170,915.0	\$0.0	-\$170,915.0
(PWSS)	\$98,978.8	\$101,963.0	\$67,892.0	-\$34,071.0
Categorical Grant: State and Local Air Quality Management	\$229,030.4	\$228,219.0	\$151,961.0	-\$76,258.0
Categorical Grant: Radon	\$8,198.0	\$8,051.0	\$0.0	-\$8,051.0
Categorical Grant: Pollution Control (Sec. 106)				
Monitoring Grants	\$17,766.8	\$17,848.0	\$11,884.0	-\$5,964.0
Categorical Grant: Pollution Control (Sec. 106) (other activities)	\$211,267.6	\$212,958.0	\$141,799.0	-\$71,159.0
Subtotal, Categorical Grant: Pollution Control (Sec. 106)	\$229,034.4	\$230,806.0	\$153,683.0	-\$77,123.0
Categorical Grant: Wetlands Program Development	\$15,111.2	\$14,661.0	\$9,762.0	-\$4,899.0
Categorical Grant: Underground Injection Control (UIC)	\$10,130.3	\$10,506.0	\$6,995.0	-\$3,511.0
Categorical Grant: Pesticides Program Implementation	\$12,728.1	\$12,701.0	\$8,457.0	-\$4,244.0
Categorical Grant: Lead	\$13,016.2	\$14,049.0	\$0.0	-\$14,049.0
Categorical Grant: Hazardous Waste Financial Assistance	\$97,994.5	\$99,693.0	\$66,381.0	-\$33,312.0
Categorical Grant: Pesticides Enforcement	\$17,924.6	\$18,050.0	\$10,531.0	-\$7,519.0
Categorical Grant: Pollution Prevention	\$4,115.9	\$4,765.0	\$0.0	-\$4,765.0
Categorical Grant: Toxics Substances Compliance	\$4,685.5	\$4,919.0	\$3,276.0	-\$1,643.0
Categorical Grant: Tribal General Assistance Program	\$65,266.1	\$65,476.0	\$44,233.0	-\$21,243.0
Categorical Grant: Underground Storage Tanks	\$1,320.0	\$1,498.0	\$0.0	-\$1,498.0
Categorical Grant: Tribal Air Quality Management	\$12,767.9	\$12,829.0	\$8,963.0	-\$3,866.0
Categorical Grant: Environmental Information	\$9,550.3	\$9,646.0	\$6,422.0	-\$3,224.0

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Categorical Grant: Beaches Protection	\$9,552.0	\$9,549.0	\$0.0	-\$9,549.0
Categorical Grant: Brownfields	\$46,941.8	\$47,745.0	\$31,791.0	-\$15,954.0
Categorical Grant: Multipurpose Grants	\$56.1	\$10,000.0	\$10,000.0	\$0.0
Categorical Grant: Sector Program	\$103.4	\$0.0	\$0.0	\$0.0
Subtotal, Categorical Grants	\$1,054,098.3	\$1,076,041.0	\$580,347.0	-\$495,694.0
Congressional Priorities				
Congressionally Mandated Projects	\$6,788.8	\$0.0	\$0.0	\$0.0
Total, State and Tribal Assistance Grants	\$4,067,093.9	\$4,212,161.0	\$2,774,602.0	-\$1,437,559.0
Hazardous Waste Electronic Manifest System Fund				
Resource Conservation and Recovery Act (RCRA)				
RCRA: Waste Management	\$2,146.2	\$0.0	\$0.0	\$0.0
Total, Hazardous Waste Electronic Manifest System Fund	\$2,146.2	\$0.0	\$0.0	\$0.0
Water Infrastructure Finance and Innovation Fund				
Water Quality Protection				
Water Infrastructure Finance and Innovation	\$12,235.8	\$63,000.0	\$25,000.0	-\$38,000.0
Total, Water Infrastructure Finance and Innovation Fund	\$12,235.8	\$63,000.0	\$25,000.0	-\$38,000.0
Subtotal, EPA	\$8,751,799.4	\$8,973,336.0	\$6,295,490.0	-\$2,677,846.0
Cancellation of Funds	\$0.0	-\$148,848.0	-\$227,000.0	-\$78,152.0
TOTAL, EPA	\$8,751,799.4	\$8,824,488.0	\$6,068,490.0	-\$2,755,998.0

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

Summary of Agency Resources by Appropriation

(Dollars in Thousands)

Appropriation	FY 2018 Enacted	FY 2019 Annualized CR	FY 2020 Pres Bud	Delta FY 2020 PB - FY 2019 ACR
Science and Technology (S&T)	\$713,823	\$713,823	\$463,060	(\$250,763)
Environmental Program Management (EPM)	\$2,643,299	\$2,643,299	\$1,845,268	(\$798,031)
Inspector General (IG)	\$41,489	\$41,489	\$38,893	(\$2,596)
Building and Facilities (B&F)	\$34,467	\$34,467	\$39,553	\$5,086
Hazardous Substance Superfund (SF) -Superfund Program	\$1,154,947 \$1,130,673	\$1,154,947 \$1,130,673	\$1,045,351 \$1,017,990	(\$109,596) (\$112,683)
-Superjuna Frogram -Inspector General Transfer	\$8,778	\$8,778	\$9,586	\$808
-Science & Technology Transfer	\$15,496	\$15,496	\$17,775	\$2,279
Inland Oil Spill Program (Oil)	\$18,209	\$18,209	\$15,962	(\$2,247)
Leaking Underground Storage Tanks (LUST)	\$91,941	\$91,941	\$47,801	(\$44,140)
State and Tribal Assistance Grants (STAG)	\$4,212,161	\$4,212,161	\$2,774,602	(\$1,437,559)
-Categorical Grants	\$1,076,041	\$1,076,041	\$580,347	(\$495,694)
-State Revolving Funds	\$2,857,120	\$2,857,120	\$1,983,005	(\$874,115)
-All Other STAG	\$279,000	\$279,000	\$211,250	(\$67,750)
Water Infrastructure Finance and Innovation Program (WIFIA)	\$63,000	\$63,000	\$25,000	(\$38,000)
E-Manifest ¹	\$0	\$0	\$0	\$0
Cancellations	(\$148,848)	(\$148,848)	(\$227,000)	(\$78,152)

Agency Total	\$8,824,488 \$8,82	24,488 \$6,068,490 (\$2,755,998)
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Note: S&T and IG totals do not include Superfund transfers – see the Superfund line items for annuals amounts.

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¹ E-Manifest will be fully fee-funded in FY 2020

Categorical Program Grants

by National Program and State Grant

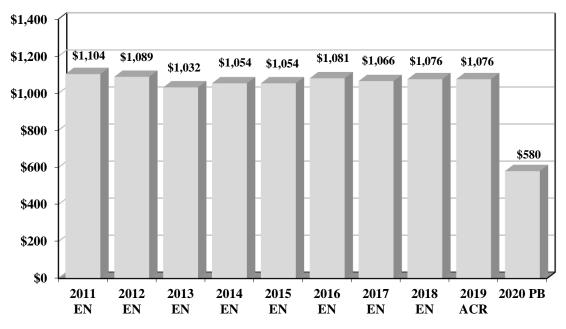
(Dollars in Thousands)

NPM / G	rant	FY 2018 Actuals	FY 2019 ACR	FY 2020 Pres Bud	Delta FY 2020 PB - FY 2019 ACR	% Change FY 2020 PB - FY 2019 ACR
Air & Ra	ndiation_					
	State and Local Air Quality Management	\$229,030	\$228,219	\$151,961	(\$76,258)	-33.4%
	Tribal Air Quality Management	\$12,768	\$12,829	\$8,963	(\$3,866)	-30.1%
	Radon	\$8,198	\$8,051	\$0	(\$8,051)	-100.0%
		\$249,996	\$249,099	\$160,924	(\$88,175)	-35.4%
Water						
	Pollution Control (Sec. 106)	\$229,034	\$230,806	\$153,683	(\$77,123)	-33.4%
	Beaches Protection	\$9,552	\$9,549	\$0	(\$9,549)	-100.0%
	Nonpoint Source (Sec. 319)	\$167,593	\$170,915	\$0	(\$170,915)	-100.0%
	Wetlands Program Development	\$15,111	\$14,661	\$9,762	(\$4,899)	-33.4%
		\$421,290	\$425,931	\$163,445	(\$262,486)	-61.6%
Drinking	Water					
	Public Water System Supervision					
	(PWSS)	\$98,979	\$101,963	\$67,892	(\$34,071)	-33.4%
	Underground Injection Control (UIC)	\$10,130	\$10,506	\$6,995	(\$3,511)	-33.4%
		\$109,109	\$112,469	\$74,887	(\$37,582)	-33.4%
<u>Hazardo</u>	us Waste					
	Hazardous Waste Financial Assistance	\$97,995	\$99,693	\$66,381	(\$33,312)	-33.4%
	Brownfields	\$46,942	\$47,745	\$31,791	(\$15,954)	-33.4%
	Underground Storage Tanks	\$1,320	\$1,498	\$0	(\$1,498)	-100.0%
		\$146,256	\$148,936	\$98,172	(\$50,764)	-34.1%
Pesticide	s & Toxics					
	Pesticides Program Implementation	\$12,728	\$12,701	\$8,457	(\$4,244)	-33.4%
	Lead	\$13,016	\$14,049	\$0	(\$14,049)	-100.0%
	Toxics Substances Compliance	\$4,686	\$4,919	\$3,276	(\$1,643)	-33.4%
	Pesticides Enforcement	\$17,925	\$18,050	\$10,531	(\$7,519)	-41.7%
		\$48,354	\$49,719	\$22,264	(\$27,455)	-55.2%
Multime	dia					
	Environmental Information	\$9,550	\$9,646	\$6,422	(\$3,224)	-33.4%
	Multipurpose Grants	\$56	\$10,000	\$10,000	\$0	N/A
	Pollution Prevention	\$4,116	\$4,765	\$0	(\$4,765)	-100.0%
	Tribal General Assistance Program	\$65,266	\$65,476	\$44,233	(\$21,243)	-32.4%
		\$78,988	\$89,887	\$60,655	(\$29,232)	-32.5%
	Total Categorical Grants	\$1,053,995	\$1,076,041	\$580,347	(\$495,694)	-46.1%

Note: Number do not reflect cancellation of funds in FY 2019 ACR or FY 2020 PB.

Categorical Grants

(Dollars in Millions)



Note: EN – Enacted, ACR – Annualized Continuing Resolution, PB – President's Budget

Categorical Grants

In FY 2020, EPA requests a total of \$580.3 million for 14 categorical program grants for state, interstate organizations, non-profit organizations, intertribal consortia, and tribal governments. EPA will continue to pursue its strategy of building and supporting state, local, and tribal capacity to implement, operate, and enforce the nation's environmental laws. Most environmental laws were designed with a decentralized nationwide structure to protect public health and the environment. In this way, environmental goals will ultimately be achieved through the actions, programs, and commitments of state, tribal, and local governments, organizations, and citizens.

In FY 2020, EPA will continue to offer flexibility to state and tribal governments to manage their environmental programs as well as provide technical and financial assistance to achieve mutual environmental goals. First, EPA and its state and tribal partners will continue implementing the National Environmental Performance Partnership System (NEPPS). NEPPS is designed to allow states the flexibility to operate their programs, while continuing to emphasize measuring and reporting of environmental results. Second, Performance Partnership Grants (PPGs) will continue to allow states and tribes funding flexibility to combine categorical program grants to address environmental priorities and, in some cases, to reduce administrative burden. In FY 2020, EPA will increase flexibility through a request of \$10.0 million for the Multipurpose Grants program which are intentionally structured to allow states, tribes, and territories to apply funding toward activities required in a broad array of environmental statutes, depending on local needs and priorities.

HIGHLIGHTS:

State & Local Air Quality Management, and Tribal Air Quality Management

The FY 2020 request includes \$160.9 million for grants to support State and Local and Tribal Air Quality Management programs. Grant funds for State and Local Air Quality Management and Tribal Air Quality Management are requested in the amounts of \$152.0 million and \$9.0 million, respectively. These funds provide resources to multi-state, state, local, and tribal air pollution control agencies for the development and implementation of programs for the prevention and control of air pollution and for the implementation of National Ambient Air Quality Standards (NAAQS) set to protect public health and the environment. There is a focus on prioritizing timely and necessary actions to improve air quality in nonattainment areas and to reduce the number of areas not in attainment with the NAAQS. In FY 2020, EPA will continue to work with state and local air pollution control agencies to develop and implement state implementation plans (SIPs) for NAAQS, monitor industry compliance with EPA stationary source regulations, develop plans for regional haze, and develop and operate air quality monitoring networks.

EPA will work with federally recognized tribal governments nationwide to develop and implement tribal air quality management programs and to build tribal air quality management capacity. Tribes are active in protection of air quality for the land over which they have sovereignty and work closely with the EPA to monitor and report air quality information.

Water Pollution Control (Clean Water Act Section 106) Grants

EPA's FY 2020 request includes \$153.7 million for Water Pollution Control grants to state, interstate, and tribal water quality programs. These water quality funds assist state and tribal efforts to restore and maintain the quality of the nation's waters through water quality standards, improved water quality monitoring and assessment, implementation of Total Maximum Daily Loads (TMDLs) and other watershed-related plans, and to operate the National Pollutant Discharge Elimination System (NPDES) permit program.

States and authorized tribes will continue to review and update their water quality standards as required by the Clean Water Act. In FY 2020, EPA requests \$11.9 million of the Section 106 program funding be provided to states and tribes that participate in collecting statistically valid water monitoring data to implement enhancements in their water monitoring programs.

Wetlands Grants

In FY 2020, the EPA request includes \$9.8 million for Wetlands Program grants, which provide technical and financial assistance to states, tribes, and local governments. These grants support development of state and tribal wetland programs that further the national goal of an overall increase in the acreage and condition of wetlands. The Wetland Program Development Grants are the EPA's primary resource for supporting state and tribal wetland program development. Grants are used to develop new or refine existing state and tribal wetland programs in one or more of the following areas: monitoring and assessment, voluntary restoration and protection, regulatory programs including Section 401 certification, and wetland water quality standards.

Public Water System Supervision Grants

In FY 2020, the EPA requests \$67.9 million for Public Water System Supervision (PWSS) grants. These grants assist states and tribes in implementing and enforcing National Primary Drinking Water Regulations to ensure the safety of the Nation's drinking water resources and to protect public health. Through this funding, EPA, states and tribes will build on current efforts to identify, prevent, and protect drinking water from known and emerging contaminants that potentially endanger public health. All these activities help address health-based violations, water supply shortages, and provide operational efficiencies that protect the nation's infrastructure investment.

Underground Injection Control (UIC) Grants

In FY 2020, the EPA requests \$7.0 million for the Underground Injection Control (UIC) grants program. Grants are provided to states that have primary enforcement authority (primacy) to implement and maintain UIC programs. The funding allows for the implementation of the UIC program, including for states and tribes to administer UIC permitting programs, provide program oversight, implementation tools, and public outreach, and ensure that injection wells are safely operated. In addition, the EPA will continue to process primacy applications and permit applications for Class VI geological sequestration wells. EPA directly implements the Class VI geologic sequestration program in all states but North Dakota as no other states have received approval for Class VI primacy either through a state UIC program revision or through a new application from states without any UIC primary enforcement authority.

Multipurpose Grants

In FY 2020, EPA requests \$10.0 million for the Multipurpose Grants program. These flexible grants support efforts to implement mandatory statutory duties delegated by EPA under pertinent environmental laws. Recognizing that environmental challenges vary due to factors such as geography, population density, and economic activities, this program provides EPA's partners with flexibility to target funds to their highest priority efforts to protect human health and the environment.

Tribal General Assistance Program Grants

In FY 2020, the EPA requests \$44.2 million in General Assistance Program (GAP) grants to provide tribes with a foundation to build their capacity to address environmental issues on Indian lands. This request will assist the EPA's partnership and collaboration with tribes to address environmental program responsibilities and challenges. Resources will support activities to help tribes transition from capacity development to program implementation and support the development of EPA-Tribal Environmental Plans (ETEPs) to identify EPA and tribal responsibilities for ensuring environmental and public health responsibilities in Indian Country. The grants will assist tribal governments in building environmental capacity to assess environmental conditions, utilize available federal and other information, and build and administer environmental programs tailored to their needs.

Pesticide Enforcement and Toxics Substances Compliance Grants

The FY 2020 request includes \$13.8 million to build environmental partnerships with states and tribes that strengthen their ability to address environmental and public health threats from pesticides and toxic substances. The compliance monitoring and enforcement state grants request

Categorical Grants Overview

consists of \$10.5 million for Pesticides Enforcement and \$3.3 million for Toxic Substances Compliance Grants.

State and tribal compliance and enforcement grants will be awarded to assist in the implementation of compliance and enforcement provisions of the Toxic Substances Control Act (TSCA) and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The Toxic Substance Compliance Grants fund activities which protect the public and the environment from hazards associated with exposure to polychlorinated biphenyls (PCBs), asbestos, and lead-based paint.

Under the Pesticides Enforcement Grant program, EPA provides resources to states and tribes to conduct FIFRA compliance inspections, take appropriate enforcement actions, and implement programs for farm worker protection. The program also sponsors training for state and tribal inspectors through the Pesticide Inspector Residential Program (PIRT) and for state and tribal managers through the Pesticide Regulatory Education Program (PREP). These grants support state and tribal compliance activities to protect the environment from harmful chemicals and pesticides.

Pesticides Program Implementation Grants

The FY 2020 request includes \$8.5 million for Pesticides Program Implementation grants. These resources will assist states, tribes, and partners with outreach, training, technical assistance, and implementation of various pesticide programs and issues including: pesticide worker safety, protection of endangered species and water sources, bed bug issues, pollinator protection, spray drift reduction, and promotion of environmental stewardship approaches to pesticide use. The Pesticides Program Implementation grants help state programs stay current with changing requirements.

Environmental Information Grants

In FY 2020, EPA requests \$6.4 million for the Environmental Information Exchange Network (EN) grant program. The EN grants provide funding to states, territories, federally recognized tribes, and tribal consortia to support their participation in the EN. These grants help EN partners acquire and develop the hardware and software needed to connect to the EN; use the EN to collect, report, access, and analyze the data they need with greater efficiency; and integrate environmental data across programs. In collaboration with EPA, the states and tribes accept the EN as the standard approach for EPA and state data sharing. The grant program provides the funding to make this approach a reality. Specifically, grants will be used to develop publishing services, develop desktop and mobile applications that can send and receive data via the network, expand the network to new priority data systems, transition network services to an EPA-hosted cloud-based node, increase data sharing among partners, bring electronic reporting into compliance with the Cross-Media Electronic Reporting Rule (CROMERR) using EPA hosted shared services, as well as other priorities.

In FY 2020, EPA will continue to collaborate with our state, local, and tribal partners to achieve benefits that reach beyond the standardization and exchange of data. EPA, states and tribes are making progress on implementing business processes and systems to reduce reporting burden on regulated facilities and improving effectiveness and efficiency of environmental protection programs. This work builds on the successful state/EPA collaboration with the EN, a partnership which is enabling the exchange and sharing of critical environmental data, leading to enhanced

Categorical Grants Overview

analysis of environmental conditions and improved decision-making. In FY 2020, the Agency will adjust schedules and priorities to align with capacity.

Hazardous Waste Financial Assistance Grants

In FY 2020, EPA requests \$66.4 million for Hazardous Waste Financial Assistance grants. Hazardous Waste Financial Assistance grants are used for the implementation of the Resource Conservation and Recovery Act (RCRA) hazardous waste program, which includes permitting, authorization, waste minimization, enforcement, and corrective action activities.

Brownfields Grants

In FY 2020, EPA requests \$31.8 million for the Brownfields grant program that provides assistance to states and tribes to establish core capabilities and enhance their state and tribal Brownfields response programs. These response programs address contaminated brownfields sites that do not require federal action but need assessment and/or cleanup before they can be ready for reuse. States and tribes may use grant funding under this program for a number of areas, including: to develop a public record, create an inventory of brownfields sites, develop oversight and enforcement authorities, conduct public education and opportunities for public participation, develop mechanisms for approval of cleanup plans and certification that cleanup efforts are completed, purchase environmental insurance, develop tracking and management systems for land use, and conduct site specific activities such as assessments and cleanups at brownfields sites.

Drinking Water State Revolving Fund (DWSRF) Resources Clean Water State Revolving Fund (CWSRF) Resources

State-by-State distribution of Actual and Estimated Obligations Fiscal Years 2018 to 2020 – Dollars in Thousands

The following tables show state-by-state distribution of resources for EPA's two largest state and tribal Grant Programs, the Drinking Water State Revolving Fund and the Clean Water State Revolving Fund.

Infrastructure Assistance: Drinking Water State Revolving Fund (SRF)

(Dollars in Thousands)

	FY 2018	FY 2019	FY 2020
STATE	ACT. OBLIG.	EST. OBLIG.	EST. OBLIG.
Alabama	\$23,944	\$24,468	\$18,088
Alaska	\$11,107	\$11,351	\$8,391
American Samoa	\$4,184	\$4,276	\$3,161
Arizona	\$25,480	\$20,414	\$15,090
Arkansas	\$16,711	\$17,077	\$12,624
California	\$98,940	\$100,130	\$74,020
Colorado	\$21,946	\$22,427	\$16,579
Connecticut	\$11,107	\$11,351	\$8,391
Delaware	\$11,107	\$11,351	\$8,391
District of Columbia	\$12,207 \$42,725	\$11,351 \$44,692	\$8,391
Florida	\$43,725 \$26,175	\$44,682 \$26,748	\$33,030 \$19,773
Georgia Guam	\$4,349	\$3,975	\$2,938
Hawaii	\$11,107	\$11,351	\$8,391
Idaho	\$11,107	\$11,351 \$11,351	\$8,391
Illinois	\$41,908	\$42,825	\$31,658
Indiana	\$16,978	\$17,350	\$12,826
Iowa	\$17,348	\$17,982	\$13,293
Kansas	\$12,887	\$13,169	\$9,735
Kentucky	\$18,303	\$18,704	\$13,827
Louisiana	\$16,625	\$16,989	\$12,559
Maine	\$11,107	\$11,351	\$8,391
Maryland	\$20,348	\$20,793	\$15,371
Massachusetts	\$25,774	\$26,338	\$19,470
Michigan	\$27,266	\$27,863	\$20,597
Minnesota	\$16,955	\$17,327	\$12,808
Mississippi	\$11,957	\$12,219	\$9,033
Missouri	\$19,582	\$20,011	\$14,793
Montana	\$11,107	\$11,351	\$8,391
Nebraska	\$10,914	\$11,351	\$8,391
Nevada	\$12,876 \$44,400	\$13,158	\$9,727
New Hampshire	\$11,108 \$18,057	\$11,351 \$10,372	\$8,391
New Jersey New Mexico	\$18,957 \$13,400	\$19,372 \$11,351	\$14,321 \$8,391
New York	\$45,363	\$46,355	\$34,267
North Carolina	\$34,111	\$34,857	\$25,767
North Dakota	\$11,107	\$11,351	\$8,391
Northern Mariana Islands	\$5,559	\$3,347	\$2,474
Ohio	\$27,935	\$28,546	\$21,103
Oklahoma	\$16,031	\$16,092	\$11,896
Oregon	\$14,654	\$14,934	\$11,040
Pennsylvania	\$34,202	\$34,951	\$25,837
Puerto Rico	\$8,241	\$11,351	\$8,391
Rhode Island	\$11,107	\$11,351	\$8,391
South Carolina	\$14,385	\$14,700	\$10,867
South Dakota	\$11,107	\$11,351	\$8,391
Tennessee	\$19,293	\$19,716	\$14,575
Texas	\$87,040	\$88,944	\$65,750
Utah	\$11,107	\$11,351	\$8,391
Vermont	\$11,107	\$11,351	\$8,391
Virgin Islands, U.S.	\$4,084 \$18,123	\$5,428 \$18,520	\$4,013
Virginia Washington	\$18,123 \$24,815	\$18,520 \$25,358	\$13,690 \$18,745
West Virginia	\$24,615 \$11,107	\$25,356 \$11,351	\$16,745 \$8,391
Wisconsin	\$18,931	\$19,346	\$14,301
Wyoming	\$10,931	\$11,351	\$8,391
Tribal Resources	\$11,171	\$23,265	\$20,000
Non-state Resources	\$8,985 ¹	\$4,908 ²	\$4,158 ³
TOTAL:	\$1,128,161	\$1,163,233	\$863,233
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Notes:

- Includes \$2 million in Unregulated Contaminant Monitoring Rule (UCMR) set aside, \$3.561 million for American Iron and Steel Management and Oversight, \$3.369 million for an Interagency Agreement with the Indian Health Service to increase basic drinking water infrastructure to Indian Tribes, \$55 thousand to Contract to Northbridge Group Incorporated to develop
- a loan and grants tracking system for the Drinking Water State Revolving Fund Grant.
 Includes \$2 million for UCMR set aside and \$2.926 million for American Iron and Steel Management and Oversight.
 Includes \$2 million for UCMR set aside and \$2.158 million for American Iron and Steel Management and Oversight.

Infrastructure Assistance: Clean Water State Revolving Fund (SRF)

(Dollars in Thousands)

ACT. BEST. OBLIG. OBLI		FY 2018	FY 2019	FY 2020
Alabama	STATE	ACT.	EST.	EST.
Alaska \$9,703 \$9,929 \$6,516 American Samoa \$9,323 \$8,323 \$8,00 Arkansas \$10,666 \$11,055 \$7,355 Arkansas \$10,666 \$11,067 \$118,662 \$77,866 Colorado \$12,969 \$13,270 \$8,706 Connecticut \$19,862 \$20,324 \$13,335 Delaware \$7,959 \$8,144 \$5,446 District of Columbia \$7,959 \$8,144 \$5,446 Florida \$27,367 \$28,050 318,405 Geuam \$7,725 \$6,507 \$42,727 Hawaii \$12,831 \$12,849 \$13,401 Idaho \$73,959 \$8,144 \$5,344 Ilinois \$73,389 \$75,032 \$49,241 Idaho \$73,389 \$75,032 \$49,241 Idaho \$73,389 \$5,144 \$5,344 Ilinois \$73,389 \$75,032 \$49,241 Idaha \$71,942 \$22,453 \$14,735 <t< th=""><th></th><th></th><th></th><th></th></t<>				
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Kansas \$14,609 \$14,975 \$9,825 Kentucky \$20,598 \$21,115 \$13,857 Louisiana \$17,948 \$18,237 \$11,965 Maine \$12,550 \$12,842 \$4,425 \$26,333 Massachusetts \$55,045 \$56,327 \$36,966 \$36,966 Michigan \$69,911 \$71,334 \$46,815 \$40,969 \$30,493 \$20,012 \$41,563 \$14,947 \$38,000 \$30,966 \$61,911 \$71,334 \$46,815 \$46,815 \$44,944 \$45,991 \$30,183 \$40,011 \$44,944 \$45,991 \$30,183 \$40,011 \$44,944 \$45,991 \$30,183 \$40,011 \$44,944 \$45,991 \$30,183 \$60,011 \$60,013 \$60,013 \$60,013 \$60,013 \$60,013 \$60,013 \$60,013 \$60,013 \$60,013 \$60,013 \$60,013 \$60,013 \$60,013 \$60,014 \$60,014 \$60,014 \$60,014 \$60,014 \$60,014 \$60,014 \$60,014 \$60,014 \$60,014 \$60,014 \$60,014			: :	: 1
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Maine \$12,550 \$12,842 \$8,425 Maryland \$39,212 \$40,125 \$26,333 Massachusetts \$55,045 \$56,927 \$36,966 Michigan \$69,911 \$71,334 \$46,815 Minnesota \$29,799 \$30,493 \$22,012 Mississippi \$14,583 \$14,947 \$9,805 Missouri \$44,944 \$45,991 \$30,182 Mortana \$7,959 \$8,144 \$5,345 Nebraska \$8,170 \$8,486 \$5,565 New Hampshire \$16,202 \$16,579 \$10,880 New Jersey \$66,333 \$67,794 \$44,949 New Mexico \$9,366 \$8,144 \$5,345 New York \$178,948 \$183,120 \$12,017 North Carolina \$29,209 \$29,941 \$19,656 North Dakota \$7,994 \$8,144 \$5,345 North Carolina \$91,270 \$93,395 \$61,203 Oregon \$14,184 \$13,403 \$8,795				\$11,969
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Michigan \$69,911 \$71,334 \$46,815 Minnesota \$29,799 \$30,493 \$20,012 Mississippi \$14,583 \$14,947 \$9,806 Missouri \$44,944 \$45,991 \$30,183 Montana \$7,959 \$8,144 \$5,345 Nebraska \$8,170 \$8,486 \$5,565 Nevada \$7,959 \$8,144 \$5,345 New Hampshire \$16,202 \$16,579 \$10,805 New Jersey \$66,333 \$67,794 \$44,492 New Mexico \$9,366 \$8,144 \$5,345 New York \$178,948 \$183,120 \$120,175 North Carolina \$29,209 \$29,941 \$19,650 North Dakota \$7,994 \$8,144 \$5,345 Northern Mariana Islands \$7,799 \$4,180 \$2,209 Oklahoma \$14,184 \$13,403 \$8,796 Oklahoma \$14,184 \$13,403 \$8,796 Pennsylvania \$64,221 \$65,716 \$43,1	Maryland	\$39,212	\$40,125	\$26,333
Minnesota \$29,799 \$30,493 \$20,012 Mississippi \$14,583 \$14,984 \$45,991 \$30,183 Montana \$7,959 \$8,144 \$5,345 Nebraska \$8,170 \$8,486 \$5,565 Nevada \$7,959 \$8,144 \$5,345 New Hampshire \$16,202 \$16,579 \$10,886 New Jersey \$66,333 \$67,794 \$44,942 New Mexico \$9,366 \$8,144 \$5,345 New York \$178,948 \$183,120 \$120,175 North Carolina \$29,209 \$29,941 \$19,667 Northern Mariana Islands \$7,994 \$8,144 \$5,345 Northern Mariana Islands \$7,799 \$8,144 \$5,345 Northern Mariana Islands \$7,994 \$8,144 \$5,345 Okiahoma \$14,184 \$13,403 \$8,796 Okiahoma \$14,184 \$13,403 \$8,796 Oregon \$18,315 \$18,741 \$12,299 Pennsylvania \$64,22	Massachusetts	\$55,045		\$36,966
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Montana \$7,959 \$8,144 \$5,345 Nebraska \$8,170 \$8,486 \$5,565 Nevada \$7,959 \$8,144 \$5,345 New Hampshire \$16,202 \$16,579 \$10,880 New Jersey \$66,333 \$67,794 \$44,492 New Mexico \$9,366 \$8,144 \$5,345 New York \$178,948 \$183,120 \$120,175 North Carolina \$29,209 \$29,941 \$19,650 North Dakota \$7,994 \$8,144 \$5,345 North Dakota \$7,994 \$8,144 \$5,345 Northern Mariana Islands \$4,779 \$4,180 \$2,744 Ohio \$91,270 \$93,395 \$61,293 Oklahoma \$14,184 \$13,403 \$8,796 Oregon \$18,315 \$18,741 \$12,299 Pennsylvania \$64,221 \$65,716 \$43,126 Pennsylvania \$16,609 \$16,969 \$11,154 South Carolina \$16,609 \$16,996 \$1	Mississippi	\$14,583	\$14,947	\$9,809
Nebraska \$8,170 \$8,486 \$5,565 Nevada \$7,959 \$8,144 \$5,345 New Hampshire \$16,202 \$16,579 \$10,886 New Jersey \$66,333 \$67,794 \$44,492 New Mexico \$9,366 \$8,144 \$5,345 New York \$178,948 \$13,120 \$120,175 North Carolina \$29,209 \$29,941 \$19,650 North Dakota \$7,994 \$8,144 \$5,345 Northern Mariana Islands \$7,994 \$8,144 \$5,345 Northern Mariana Islands \$4,779 \$4,180 \$2,744 Ohio \$91,270 \$93,395 \$61,293 Oklahoma \$14,184 \$13,403 \$8,796 Oregon \$18,315 \$18,741 \$12,299 Pennsylvania \$64,221 \$65,716 \$43,128 Puerto Rico \$17,503 \$21,638 \$14,209 Rhode Island \$10,886 \$11,140 \$7,311 South Dakota \$7,999 \$8,144	Missouri			\$30,183
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New Mexico \$9,366 \$8,144 \$5,345 New York \$178,948 \$183,120 \$120,175 North Carolina \$29,209 \$29,941 \$19,650 North Dakota \$7,994 \$8,144 \$5,345 Northern Mariana Islands \$4,779 \$4,180 \$2,745 Ohio \$91,270 \$93,395 \$61,293 Oklahoma \$14,184 \$13,403 \$8,796 Oregon \$18,315 \$18,741 \$12,295 Pennsylvania \$64,221 \$65,716 \$43,122 Puerto Rico \$17,503 \$21,638 \$14,200 Rhode Island \$10,886 \$11,140 \$7,311 South Carolina \$16,609 \$16,996 \$11,154 South Dakota \$7,959 \$8,144 \$5,345 Texas \$74,102 \$75,827 \$49,763 Utah \$8,543 \$8,741 \$5,737 Vermont \$7,959 \$8,144 \$5,345 Virgin Islands, U.S. \$4,213 \$5,220 <td< td=""><td>New Hampshire</td><td>\$16,202</td><td>\$16,579</td><td>\$10,880</td></td<>	New Hampshire	\$16,202	\$16,579	\$10,880
New York \$178,948 \$183,120 \$120,175 North Carolina \$29,209 \$29,941 \$19,650 North Dakota \$7,994 \$8,144 \$5,345 Northern Mariana Islands \$4,779 \$4,180 \$2,744 Ohio \$91,270 \$93,395 \$61,293 Oklahoma \$14,184 \$13,403 \$8,796 Oregon \$18,315 \$18,741 \$12,296 Pennsylvania \$64,221 \$65,716 \$43,125 Puerto Rico \$17,503 \$21,638 \$14,200 Rhode Island \$10,886 \$11,140 \$7,311 South Carolina \$16,609 \$16,996 \$11,154 South Dakota \$7,959 \$8,144 \$5,345 Tennessee \$23,511 \$24,100 \$15,816 Texas \$74,102 \$75,827 \$49,763 Utah \$8,543 \$8,741 \$5,737 Vermont \$7,959 \$8,144 \$5,345 Virginia \$33,80 \$33,952 \$22,222<	•			\$44,492
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Northern Mariana Islands Ohio Sp1,270 Sp3,395 S61,293 Oklahoma St4,184 St3,403 S8,796 Oregon St8,315 Se4,221 Se5,716 S43,128 Pennsylvania Puerto Rico Rhode Island South Carolina South Carolina South Dakota Tennessee S23,511 South Dakota Texas S74,102 S75,827 Vermont Vermont Virgin Islands, U.S. Virginia Washington Washington Wyoming Tribal Resources S4,785 S4,180 S2,744 S12,993 S61,293 S43,128 S				
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Notes:

- Includes \$6.389 million for an Interagency Agreement with the Indian Health Service to provide services to increase basic sanitation access by providing wastewater infrastructure to Indian Tribes. \$847 thousand for American Iron and Steel Management and Oversight.
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Infrastructure / STAG Project Financing

Infrastructure and Special Projects Funds

The FY 2020 President's Budget requests a total of \$2.17 billion for EPA's Infrastructure programs in the State and Tribal Assistance Grant (STAG) and Water Infrastructure Finance and Innovation Act (WIFIA) accounts. Infrastructure programs include: the State Revolving Funds (SRFs), WIFIA, Alaska Native Villages, and Brownfields Projects. In addition, in FY 2020 EPA will begin to implement the new America's Waster Infrastructure Act of 2018 (AWIA) legislation to address water infrastructure challenges throughout the Nation. EPA also will provide grant funding to address risks to children's health through the new Healthy Schools Grant Program.

With funds provided to the SRFs and technical assistance funding through EPA's operating programs in FY 2020, EPA will continue its effort to build the capacity of local utilities, private investors, and state programs to expand their contribution to the array of funding options to meet future infrastructure needs. Infrastructure and targeted project funding, under the STAG appropriation, provides financial assistance to states, municipalities, interstates, and tribal governments to fund a variety of drinking water, wastewater, air, and brownfields environmental projects. These funds help fulfill the federal government's commitment to help our state, tribal, and local partners comply with federal environmental requirements to ensure public health and revitalize contaminated properties.

By providing STAG funds to capitalize SRF programs, EPA enables the states to provide low-cost loans to municipalities for infrastructure construction. All drinking water and wastewater projects are funded based on state-developed priority lists. Through SRF set-asides, grants are available to Indian tribes and U.S. territories for infrastructure projects. The resources included in this budget will enable the Agency, in conjunction with EPA's state, local, and tribal partners, to achieve important goals.

Capitalizing Drinking Water and Clean Water State Revolving Funds

The Drinking Water and Clean Water State Revolving Fund programs demonstrate a true partnership between states, localities, and the federal government. These programs provide federal financial assistance, in the form of capitalization grants, to states to protect the nation's water resources. These funds are used for the construction of drinking water and wastewater infrastructure and treatment facilities. The state revolving funds are two important elements of the nation's substantial investment in sewage treatment and drinking water systems, which provide Americans with significant benefits in the form of reduced water pollution and safer drinking water.

This federal investment also will support the continued work of the SRFs in ensuring that small and underserved communities have tools available to help address their pressing water infrastructure and other water quality needs. Many small systems face significant investment needs critical for the public health and environmental safety of the towns and cities they serve. EPA will focus on issues such as: financial planning for future infrastructure investments (applications, exploring financing options, planning and design); expanding current work with states to identify

additional financing opportunities for small communities; and enhancing collaboration with USDA on training, technical assistance, and funding opportunities for small communities.

EPA will continue to provide financial assistance for wastewater and other water projects through the Clean Water State Revolving Fund (CWSRF). CWSRF projects include estuary, storm water, and sewer overflow projects. The dramatic progress made in improving the quality of wastewater treatment since the 1970s is a national success. In 1972, only 78.2 million people were served by secondary or advanced wastewater treatment facilities. As of 2012 (from the most recent Clean Watersheds Needs Survey), over 99 percent of Publicly Owned Treatment Works, serving 234 million people, use secondary treatment or better. Water infrastructure projects, supported by the program, contribute to direct ecosystem improvements by lowering the amount of nutrients and toxic pollutants in all types of surface waters.

The FY 2020 request includes \$1.120 billion in funding for the CWSRF. Total CWSRF funding made available for loans from 1988 through June 2017 exceeds \$128 billion. This total includes loan repayments, state match dollars, as well as other funding sources. EPA estimates that for every federal dollar that has been contributed, close to three dollars have been made available to municipalities to fund infrastructure projects.

The FY 2020 request includes \$863 million in funding for the Drinking Water State Revolving Fund (DWSRF). Since its inception in 1997, the DWSRF program has made \$39.8 billion available to finance 14,577 infrastructure improvement projects nationwide, with an average of \$1.95 made available to localities for every \$1 of federal funds that has been invested. The DWSRF helps address the costs of ensuring safe drinking water supplies and assists small communities in meeting their responsibilities.

Tribal communities are in need of assistance given aging or inadequate sanitation and drinking water infrastructure, which can cause significant public health concerns. To help address this situation, EPA is requesting a tribal funding floor of two percent, or \$30 million for the CWSRF and \$20 million for the DWSRF, whichever is greater, of the funds appropriated in FY 2020.

For FY 2020, EPA requests that not less than 10 percent but not more than 20 percent of the CWSRF funds and not less than 20 percent but not more than 30 percent of the DWSRF funds be made available to each state to be used to provide additional subsidy to eligible recipients in the form of forgiveness of principle, negative interest loans, or grants (or a combination of these). For FY 2020, the EPA will encourage states to utilize the subsidy to assist small drinking water and wastewater systems with standards compliance. In addition, the America's Water Infrastructure Act of 2018 requires that states receiving grants provide 6 percent to 35 percent of each state's capitalization grant as subsidy to assist disadvantaged communities.

Water Infrastructure Finance and Innovation Act Program

In FY 2020, EPA will continue to fund the WIFIA program. The FY 2020 request of \$25 million will support WIFIA credit assistance to finance drinking water and wastewater infrastructure projects. The WIFIA program will accelerate investment in our nation's water and wastewater infrastructure by providing supplemental credit assistance to credit worthy nationally and regionally significant water projects. With \$25 million in appropriations, including \$20 million in

credit subsidy, EPA could potentially provide over \$2 billion in credit assistance and, when combined with other funding sources, help to spur over \$4 billion in total infrastructure investment.¹ It is expected that entities with complex water and wastewater projects will be attracted to WIFIA and EPA will work to provide assistance to a diverse set of projects. EPA will also work to assist small and underserved communities with limited ability to repay loans. Through the Water Infrastructure and Resiliency Finance Center, EPA will work to promote public private collaboration and maintain an ongoing dialogue with the financial community to encourage investment in the water market as well as innovative financing.

America's Water Infrastructure Act of 2018 (AWIA)

In FY 2020, EPA proposes funds to begin implementing America's Water Infrastructure Act of 2018 (AWIA) grant programs that will assist in lead testing and drinking water fountain replacement in schools, sewer overflow control, and water infrastructure workforce investment. These resources would complement state and local drinking water and wastewater infrastructure investments as well as funding provided through other Federal channels. In FY 2020, a combined \$92.8 million is requested to implement AWIA legislation across six program projects including: Drinking Fountain Lead Testing, Drinking Water Infrastructure Resilience, Sewer Overflow Control Grants, Technical Assistance for Treatment Works, Lead Testing in Schools, and Water Infrastructure and Workforce Investment.

Alaska Native Villages

The FY 2020 President's Budget requests \$3.0 million for Alaska native villages for the construction of wastewater and drinking water facilities to address sanitation problems unique to this area of the country. EPA will continue to work with the Department of Health and Human Services' Indian Health Service, the State of Alaska, the Alaska Native Tribal Health Council, and local communities to provide needed financial and technical assistance.

Diesel Emissions Reduction Act Grants

The Diesel Emissions Reduction Act (DERA) program authorizes funding to provide immediate, effective emission reductions from existing diesel engines through engine retrofits, rebuilds, and replacements; switching to cleaner fuels; idling reduction strategies; and other clean diesel strategies. Retrofitting or replacing older diesel engines reduces particulate matter (PM) emissions up to 95 percent, smog-forming emissions, such as hydrocarbons (HC) and nitrogen oxide (NOx), up to 90 percent, and greenhouse gases up to 20 percent in the upgraded vehicles with engine replacements. The FY 2020 President's Budget requests \$10 million in DERA funding to continue to reduce diesel emissions in communities and areas of highly concentrated diesel pollution, including a children's health focus. EPA will coordinate these diesel emissions reduction efforts with the Department of Transportation and the Department of Energy.

Brownfields Projects

The FY 2020 President's Budget requests \$62 million for Brownfields projects. With the FY 2020 request, EPA plans to fund assessment cooperative agreements, direct cleanup cooperative agreements and Revolving Loan Fund cooperative agreements, Environmental Workforce Development & Job Training cooperative agreements, as well as provide technical assistance to

 $^{^{1}}$ This approximation is based on notional calculations. Subsidy cost is determined on a loan-by-loan basis.

Infrastructure/STAG Project Financing

support states, tribes, and communities. EPA also will support the assessment and cleanup of sites contaminated by petroleum or petroleum products.

In FY 2020, the funding provided is expected to result in the assessment and cleanup of over 1,000 brownfields properties located in economically, socially and environmentally-disadvantaged communities². Using EPA grant dollars, the brownfields grantees will leverage approximately 5,500 cleanup and redevelopment jobs and approximately \$1.0 billion in cleanup and redevelopment funding, and 5,500 acres of Brownfields will be ready for reuse. In FY 2020, EPA will continue to foster federal, state, local, and public/private partnerships to return properties to productive economic use in communities.

² See Brownfields Assessment Proposal Guidelines for evaluation criteria https://www.epa.gov/brownfields/multipurpose-assessment-rlf-and-cleanup-marc-grant-application-resources

Trust Funds

(Dollars in Millions)

	FY 2018		FY 2019		FY 2020	
	Enacted Budget		Annualized CR		President's Budget	
Trust Funds Program	\$	FTE	\$	FTE	\$	FTE
Superfund ¹	\$1,131	2,468.4	\$1,131	2,468.4	\$1,018	2,466.9
Inspector General (Transfers)	\$9	50.2	\$9	50.2	\$10	40.6
Research & Development (Transfers)	\$15	61.7	\$15	61.7	\$18	83.1
Superfund Total	\$1,155	2,580.3	\$1,155	2,580.3	\$1,045	2,590.7
LUST	\$92	48.6	\$92	48.6	\$48	40.7
Trust Funds Total ²	\$1,247	2,628.9	\$1,247	2,628.9	\$1,093	2,631.4

Totals may not add due to rounding

Superfund

In FY 2020, the President's Budget requests a total of \$1.045 billion in budget authority and 2,590.7 FTE for Superfund. This funding level will address environmental and public health risks resulting from releases or threatened releases of hazardous substances associated with any emergency site, as well as over 12,969 active Superfund National Priorities List (NPL) and non-NPL sites. It also provides funding to pursue responsible parties for cleanup costs, preserving federal dollars for sites where there are no viable contributing parties. As of the end of FY 2018, there were 1,750 sites on or deleted from the NPL. Of these, 1,205 sites (69 percent) have construction completed, 323 sites (18 percent) are undergoing cleanup construction, 218 sites (12 percent) are either pending investigation, being investigated or are in the remedial design phase, and 18 sites and 4 partial sites were deleted from the NPL. As of the end of FY 2018, EPA conducted 218 Five-Year reviews. In FY 2020, EPA plans to conduct between 190 and 200 Five-Year Reviews. EPA will prioritize ongoing fund-lead investigation, design, and construction projects to bring human exposure and groundwater migration under control. A significant statutorily required post-construction activity is a Five-Year Review, which generally is necessary when hazardous substances remain on-site above levels that permit unrestricted use and unlimited exposure.

Of the total funding requested for Superfund, \$668 million and 1,263 FTE are for Superfund cleanup programs which include the Superfund Remedial, Emergency Response and Removal, EPA Emergency Preparedness, and Federal Facilities programs. The Superfund program protects

¹ FTE numbers include all direct and reimbursable Superfund employees.

^{2.} EPAct Grants for Prevention activities are included in the FY 2018 Enacted and the FY 2019 Annualized CR.

¹ End of FY 2018 data provided from EPA's Superfund Enterprise Management System (SEMS).

the American public and its resources by cleaning up sites which pose an imminent or long-term risk of exposure and harm to human health and the environment.

In 2017, EPA convened a Superfund Task Force that identified 42 recommendations to streamline and improve the Superfund process. EPA has implemented 43 percent of the recommendations, expediting the reduction of risks to human health and the environment and accelerating the reuse of properties affected by hazardous substance contamination. In July 2018, EPA released an update to the Superfund Task Force report highlighting these accomplishments and emphasizing next steps for all open recommendations.² EPA expects to implement all the remaining recommendations by July 2019.

In FY 2020, the Agency will continue to respond to emergency releases of hazardous substances through the Superfund Emergency Response and Removal program, stabilizing sites, and mitigating immediate threats to keep our communities safe and healthy. The Superfund Remedial program will continue to maintain focus on completing projects at various stages in the response process and endeavor to maximize the use of site-specific special accounts. Special account funds may not be used for sites or uses not specified in the settlement agreement, and as a result both special account resources and annually appropriated resources are critical to the Superfund program.

Of the total funding requested, \$171.4 million and 818.1 FTE are for Superfund enforcement-related activities. One of the Superfund program's primary goals is to have responsible parties pay for and conduct cleanups at abandoned or uncontrolled hazardous waste sites. In FY 2018, the Superfund Enforcement program secured private party commitments totaling \$613 million.

CERCLA authorizes the Agency to retain and use funds received pursuant to an agreement with a potentially responsible party (PRP) to carry out the purpose of that agreement. EPA retains such funds in special accounts and uses them to finance site-specific CERCLA response actions in accordance with the settlement agreement, including, but not limited to, investigations, construction and implementation of the remedy, post-construction activities, and oversight of PRPs conducting the cleanup. Through the use of special accounts, EPA ensures responsible parties pay for cleanup so that the annually appropriated resources from the Superfund Trust Fund are preserved for sites where no viable or liable PRPs have been identified. Through the end of FY 2018, EPA has collected more than \$7.0 billion from PRPs and earned approximately \$548.3 million in interest. In addition, for those sites that had no additional work planned or costs to be incurred by EPA, EPA has transferred approximately \$33.1 million to the Superfund Trust Fund for future appropriation by Congress. As of the end of FY 2018, approximately \$3.8 billion has been disbursed to finance site response actions and approximately \$456.9 million has been obligated but not yet disbursed. Site specific plans have been developed to guide the future use of the remaining 44 percent of special account funds that have yet to be obligated.

EPA's Homeland Security work is a component of the federal government's prevention, protection, and response activities. The FY 2020 President's Budget requests \$30.0 million within the Hazardous Substance Superfund Account to: maintain the Agency's capacity to respond to

² Please see the Superfund Task Force Recommendations 2018 Update at https://semspub.epa.gov/work/HQ/197209.pdf.

incidents that may involve harmful chemical, biological, and radiological (CBR) substances; develop and maintain Agency expertise and operational readiness for all phases of consequence management following a CBR incident; and conduct CBR training for agency responders to improve CBR preparedness.

The FY 2020 President's Budget also includes resources to support agencywide resource management and control functions. This includes essential infrastructure, contract and grant administration, financial accounting, and other fiscal operations. Appropriated resources support both the activities accomplished with special accounts and those funded with annual appropriations.

In addition, the Agency provides funds for Superfund program research and for auditing. The President's Budget requests \$18 million and 83.1 FTE to be transferred to Research and Development. Research will enable EPA's Superfund program to accelerate scientifically defensible and cost-effective decisions for cleanup at complex contaminated Superfund sites and support the development of decontamination techniques for a wide-area CBR event. The Superfund research program is driven by program needs to reduce the cost of cleaning up Superfund sites, improve the efficiency of characterizing and remediating sites, identify effective remediation technologies, and reduce the scientific uncertainties for improved decision-making at Superfund sites. The President's Budget also requests \$10 million and 40.6 FTE to be transferred to the Inspector General for program auditing.

Leaking Underground Storage Tanks

The FY 2020 President's Budget requests \$47.8 million and 40.7 FTE for the Leaking Underground Storage Tank (LUST) Trust Fund program. The Agency, working with states and tribes, addresses public health and environmental threats from releases through detection and cleanup activities. As required by law (42 U.S.C. 6991c(f)), not less than 80 percent of LUST funds appropriated to cleanup will be used for reasonable costs incurred under cooperative agreements with any state to carry out related purposes.

The LUST Trust Fund financing tax was extended by Congress through September 30, 2022 in the Fixing Americas Surface Transportation Act (FAST Act). While tank owners and operators are liable for the cost of cleanups at leaking underground storage tank sites for which they have responsibility, EPA and State regulatory agencies are not always able to identify responsible parties and sometimes responsible parties are no longer financially viable or have a limited ability to pay. In those cases, the cost of the site cleanup is distributed among fuel users through a targeted fuel tax, which is available for appropriation from Congress to support leak prevention and the cleanup of sites addressed under the LUST program. For FY 2018, the Trust Fund received more than \$223 million in tax receipts.

Eliminated Program Projects

Alternative Dispute Resolution (FY 2019 Annualized CR: \$1.898 M, 8.4 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 (FY 2019 Annualized CR: \$2.014 M, 4.1 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 (FY 2019 Annualized CR: \$9.549 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: Lead (FY 2019 Annualized CR: \$14.049 M, 0.0 FTE)

The program provides support to authorized state and tribal programs that administer training and certification programs for lead paint professionals and contractors. Lead paint certification will continue under the Chemical Risk Review Reduction program.

Categorical Grant: Nonpoint Source (Sec. 319) (FY 2019 Annualized CR: \$170.915 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 (FY 2019 Annualized CR: \$4.765 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 2020, EPA will focus its resources on core statutory environmental work.

Categorical Grant: Radon (FY 2019 Annualized CR: \$8.051 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 (FY 2019 Annualized CR: \$1.498 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 (FY 2019 Annualized CR: \$7.553 M, 7.7 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) (FY 2019 Annualized CR: \$8.702 M, 10.3 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 (FY 2019 Annualized CR: \$12.542 M, 13.1 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 (FY 2019 Annualized CR: \$8.399 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 (FY 2019 Annualized CR: \$12.000 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 (FY 2019 Annualized CR: \$7.393 M, 4.6 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 (FY 2019 Annualized CR: \$28.000 M, 6.5 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 (FY 2019 Annualized CR: \$4.819 M, 2.3 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.

Geographic Program: South Florida (FY 2019 Annualized CR: \$1.704 M, 1.8 FTE)

The program leads special initiatives and planning activities in the South Florida region, which includes the Everglades and Florida Keys coral reef ecosystem. EPA will encourage state, tribal, and local entities to continue to make progress in protecting and restoring sensitive aquatic ecosystems in South Florida from within core water programs.

Gold King Mine Water Monitoring (FY 2019 Annualized CR: \$4.000 M, 0.6 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 (FY 2019 Annualized CR: \$3.295 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 (FY 2019 Annualized CR: \$10.000 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 (FY 2019 Annualized CR: \$25.369 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.

Marine Pollution (FY 2019 Annualized CR: \$11.065 M, 42.5 FTE)

The program funds the implementation of regulatory and support activities relating to ocean discharges and related marine ecosystem protection activities. EPA will continue to meet statutory mandates through the core national water program.

National Estuary Program / Coastal Waterways (FY 2019 Annualized CR: \$26.723 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 (FY 2019 Annualized CR: \$11.236 M, 46.2 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.

RCRA: Waste Minimization & Recycling (FY 2019 Annualized CR: \$9.534 M, 47.6 FTE)

The program establishes a framework for redirecting materials away from disposal and towards beneficial uses, such as composting food waste, increasing the recycling of electronics, and reducing waste from federal facilities. EPA will focus its resources on core environmental work.

Reduce Lead in Drinking Water (FY 2019 Annualized CR: \$10.000 M, 0.4 FTE)

The Reducing Lead in Drinking Water program provides grants to eligible entities for lead reduction projects. EPA will continue to work on awarding the funds appropriated by Congress in FY 2018 and FY 2019. In FY 2020 lead reduction efforts may continue through the State Revolving Fund (SRF) mechanisms, WIFIA, and the newly proposed America's Water Infrastructure Act of 2018 (AWIA) programs.

Reduce Risks from Indoor Air (FY 2019 Annualized CR: \$13.695 M, 46.0 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 (FY 2019 Annualized CR: \$1.205 M, 2.0 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 (FY 2019 Annualized CR: \$20.000 M, 0.4 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. EPA will continue to work on awarding the funds appropriated by Congress in FY 2018 and FY 2019. In FY 2020, EPA will continue to request flexible subsidization funding to target small and disadvantaged communities through the State Revolving Fund (SRF) mechanism.

Science Policy and Biotechnology (FY 2019 Annualized CR: \$2.040 M, 7.2 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.

Small Minority Business Assistance (FY 2019 Annualized CR: \$1.574 M, 8.9 FTE)

This program provides technical assistance to small businesses, headquarters, and regional office employees to ensure that small minority businesses and minority academic institutions receive a fair share of EPA's procurement dollars and grants, where applicable. The Agency will integrate its resources for Small and Disadvantaged Business activities under the Small Business Ombudsman program.

Stratospheric Ozone: Multilateral Fund (FY 2019 Annualized CR: \$8.736 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 (FY 2019 Annualized CR: \$40.000 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 PM2.5. 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 (FY 2019 Annualized CR: \$12.627 M, 66.0 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 Chemical Risk Review Reduction program. Other forms of lead exposure are addressed through other targeted programs such as the State Revolving Funds to replace lead pipes.

Trade and Governance (FY 2019 Annualized CR: \$5.463 M, 15.9 FTE)

This program promotes trade related activities focused on sustaining environmental protection. In FY 2020 EPA will focus its resources on core statutory work.

U.S. Mexico Border (FY 2019 Annualized CR: \$3.033 M, 13.9 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 2020, 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 may also continue to fund water system improvements in U.S. communities along the border.

Water Quality Research and Support Grants (FY 2019 Annualized CR: \$16.800 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 (FY 2019 Annualized Continuing Resolution: Estimated \$66.000 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 2020 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) (FY 2019 Annualized CR: \$19.014 M, 47.3 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) (FY 2019 Annualized CR: \$28.536 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) (FY 2019 Annualized CR: \$3.100 M, 8.0 FTE) WaterSense is a voluntary partnership program to label water-efficient products as a resource for helping to reduce water use.

Highlights of Major Program Changes

Air Quality

Atmospheric Protection Program

(FY 2019 Annualized CR: \$103.454 M, FY 2020 PB: \$13.965 M, FY 2020 Change: -\$89.489 M) In FY 2020, EPA will continue to implement the Greenhouse Gas Reporting program and will work to complete the annual Inventory of U.S. Greenhouse Emissions and Sinks to fulfill U.S. obligations under the Framework Convention on Climate Change (FCCC). The budget proposes to eliminate funding for fourteen voluntary climate-related partnership programs, which are further outlined in the "Eliminated Programs" section.

Diesel Emissions Reduction Act (DERA) Grant Program

(FY 2019 Annualized CR: \$75.000 M; FY 2020 PB: \$10.000 M, FY 2020 Change: -\$65.000 M) This program provides effective emission reductions from existing diesel engines through engine retrofits, rebuilds, and replacements; switching to cleaner fuels; idling reduction; and other clean diesel strategies. The Volkswagen (VW) settlement includes an option to use trust funds for DERA projects to accelerate this work. These resources, in addition to EPA's appropriated funding for diesel retrofits and replacements, will provide support for diesel emission reduction projects.

Hazardous Substances

RCRA: Waste Management

(FY 2019 Annualized CR: \$60.791 M; FY 2020 PB: \$46.813 M, FY 2020 Change: -\$13.978 M) This program helps 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. In FY 2020 the Agency will prioritize work on polychlorinated biphenyls (PCBs) cleanup and disposal programs, while reducing support for technical assistance to stakeholders on solid waste management programs. In FY 2020 an increase in resources and FTE are allocated to support states in the development and implementation for a coal combustion residual permit program.

Enforcement and Compliance Assurance

Civil Enforcement

(FY 2019 Annualized CR: \$174.316 M; FY 2020 PB: \$150.490 M, FY 2020 Change:-\$23.826 M) This program's goal 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. In FY 2020, EPA will refocus efforts toward areas with significant noncompliance issues and where enforcement can address the most substantial impacts to human health and the environment.

Better Prioritizing Research and Development

In FY 2020, the Office of Research and Development will prioritize activities directly tied to statutory requirements and inquiries into environmental and human health sciences. Extramural activities such as Science to Achieve Results (STAR) grants are eliminated due to being duplicative with other federal agency programs, such as programs under the Department of Energy (see more about STAR in the "Eliminated Programs" section). Research related to Air and Energy; Chemical Safety and Sustainability; Safe and Sustainable Water Resources; and Sustainable and Healthy Communities is streamlined to prioritize the most important scientific research work to support EPA's program offices, and states and tribes.

Research: Air and Energy

(FY 2019 Annualized CR: \$91.906 M; FY 2020 PB: \$31.707 M, FY 2020 Change: -\$60.199 M) This research program provides scientific information to EPA Program and Regional Offices, supports the analysis of research data, publishes scientific journal articles to disseminate findings, and translates research results to inform communities and individuals about measures to reduce impacts of air pollution. (Totals do not include STAR grant resources.)

Research: Chemical Safety and Sustainability (CSS)

(FY 2019 Annualized CR: \$90.407 M; FY 2020 PB: \$63.877 M, FY 2020 Change: -\$26.530 M) This research program develops innovative and cost-effective approaches and tools to better inform decisions to reduce harmful effects of chemicals on human health and the environment. In FY 2020, the CSS research program will continue to produce innovative tools that accelerate the pace of data-driven chemical evaluations, enable EPA and state decisions to be environmentally sound, protective of public health, and support sustainable innovation of chemicals. (Totals do not include STAR grant resources.)

Research: Safe and Sustainable Water Resources (SSWR)

(FY 2019 Annualized CR: \$106.257 M; FY 2020 PB: \$69.963 M, FY 2020 Change: -\$36.294 M) This research program develops cost-effective, sustainable solutions to current, emerging, and long-term water resource challenges for complex chemical and microbial contaminants. The SSWR research program's work in FY 2020 will focus explicitly on efforts integral to achieving the Agency's priorities and informing implementation of key environmental regulations by leveraging research in areas of nutrients, harmful algal blooms, watersheds and water infrastructure (including water reuse). (Totals do not include STAR grant resources.)

Research: Sustainable and Healthy Communities

(FY 2019 Annualized CR: \$146.774 M; FY 2020 PB: \$65.543 M, FY 2020 Change: -\$81.231 M) This research program develops and conducts research with a primary focus on working with communities to develop comprehensive approaches to become more sustainable, and developing decision analysis methods, tools, models, data and metrics that support community sustainability. In FY 2020, this research program will focus explicitly on efforts integral to achieving the Administrator's priorities of revitalizing land and preventing contamination, providing clean and safe water, improving air quality, and ensuring the safety of chemicals in the marketplace (Totals do not include STAR grant resources.)

Categorical Grants

In FY 2020, the following categorical grant funding levels are adjusted in line with the broader strategy of streamlining environmental protection efforts. EPA will continue to offer flexibility to state and tribal governments to manage their environmental programs as well as provide technical and financial assistance to achieve mutual environmental goals. This budget includes the Multipurpose Grant program in support of this enhanced flexibility.

Brownfields

(FY 2019 Annualized CR: \$47.745 M; FY 2020 PB: \$31.791 M, FY 2020 Change: -\$15.954 M) This program change reduces federal support for cleanup oversight by states and tribes. EPA will work with states and tribes to prioritize funds to establish core capabilities and identify program efficiencies.

Hazardous Waste Financial Assistance

(FY 2019 Annualized CR: \$99.693 M; FY 2020 PB: \$66.381 M, FY 2020 Change: -\$33.312 M) This grant program provides funding to 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. This change in funding will modify timelines for reaching cleanup milestones; delay reviews of facility data, cleanup plans, permit notifications; and reduce assistance to tribal communities.

Pollution Control (Sec. 106)

(FY 2019 Annualized CR: \$230.806 M; FY PB 2019: \$153.683 M, FY 2020 Change:-\$77.123 M) This grant program provides federal assistance to states (including territories and the District of Columbia), tribes qualified under Clean Water Act Section 518(e), and interstate agencies to establish and maintain programs for the prevention and control of surface and groundwater pollution from point and nonpoint sources. In FY 2020, EPA will focus on core statutory requirements while continuing to provide states and tribes with flexibility to best address their priorities.

Public Water System Supervision

(FY 2019 Annualized CR: \$101.963 M; FY 2020 PB: \$67.892 M, FY 2020 Change: -\$34.071 M) The program provides grants to states and tribes with primary enforcement authority (primacy) to implement and enforce the National Primary Drinking Water Regulations, as well as to build system capacity. In FY 2020, EPA will work with states and tribes to target funds to core statutory requirements while providing states and tribes with flexibility to best address their priorities.

State and Local Air Quality Management

(FY 2019 Annualized CR: \$228.219 M; FY 2020 PB: \$151.961 M, FY 2020 Change:-\$76.258 M) This program provides funding for state air programs, as implemented by multi-state, state, and local air pollution control agencies. EPA will work with states to target funds to core requirements while providing flexibility to address each state's priorities.

Tribal General Assistance Program

(FY 2019 Annualized CR: \$65.476 M; FY 2020 PB: \$44.233 M, FY 2020 Change: -\$21.243 M) This program provides grants and technical assistance to tribes to cover costs of planning, developing, and establishing tribal environmental protection programs consistent with other applicable provisions of law administered by EPA. EPA will work with tribes to reprioritize their planning and implementation efforts.

Infrastructure Assistance

Healthy Schools

(FY 2019 Annualized CR: \$0 M; FY 2020 PB: \$50.000 M, FY 2020 Change: +\$50.000 M) 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's environments be safe from environmental hazards. In FY 2020 this grant program will provide funding focused on addressing risks to children's health across multiple environmental programs to identify and help prevent, reduce and resolve environmental hazards in schools in ways responsive to local needs and priorities.

Infrastructure Assistance: Alaska Native Villages

(FY 2019 Annualized CR: \$20.000 M, FY 2020 PB: \$3.000 M, FY 2020 Change: -\$17.000) The program supports wastewater and drinking water infrastructure projects in Alaska Native and rural villages. The State Revolving Funds also are a source of infrastructure funding that can continue to fund water system improvements in Alaska.

Sewer Overflow Control Grants

(FY 2019 Annualized CR: \$0 M; FY 2020 PB: \$61.450 M, FY 2020 Change: +\$61.450 M) In FY 2020, this grant program will provide funding for addressing sewer overflows and stormwater management under America's Water Infrastructure Act (AWIA) in support of section 4106 of the law. AWIA strengthened many existing programs within EPA while creating new programs to tackle significant public health concerns and environmental needs.

Environmental Protection Agency List of Acronyms

A&E Air and Energy APG Agency Priority Goal

AWIA America's Water Infrastructure Act

ACRES Assessment Cleanup and Redevelopment Exchange System

ARRA American Recovery and Reinvestment Act

ATSDR Agency for Toxic Substances and Disease Registry

B&F Buildings and Facilities
BRAC Base Realignment and Closure

CAA Clean Air Act

CBR Chemical, Biological, Radiological
CASTNet Clean Air Status and Trends Network
CBR Chemical, Biological, Radiological

CBRN Chemical, Biological, Radiological, and Nuclear

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CDM Continuous Diagnostics and Mitigation

CHPAC Children's Health Protection Advisory Committee

CRMPs Cyber Risk Mitigation Projects

CWA Clean Water Act

CWSRF Clean Water State Revolving Fund
DWSRF Drinking Water State Revolving Fund
ECOS Environmental Council of the States

EJSCREEN Environmental Justice Screening and Mapping Tool

EDSP Endocrine Disruptor Screening Program

EIS Environmental Impact Statement

EJ Environmental Justice

EMAN Electronic Hazardous Waste Manifest System

EMANF Electronic Hazardous Waste Manifest System Fee Fund

EO Executive Order

ERIS Environmental Research Institute of the States
EPM Environmental Programs and Management
FAST Act Fixing America's Surface Transportation Act
FFDCA Federal Food, Drug, and Cosmetic Act

FIFRA Federal Insecticide, Fungicide and Rodenticide Act

FOIA Freedom of Information Act
FQPA Food Quality Protection Act
FRP Facility Response Plan
FTE Full-Time Equivalent
GHG Greenhouse Gas

GHGRP Greenhouse Gas Reporting Program
GIS Geographic Information System
HHRA Human Health Risk Assessment

HSWA Hazardous and Solid Waste Amendments of 1984 ICIS Integrated Compliance Information System

IG Inspector General

IM Information Management

IPCC Intergovernmental Panel on Climate Change

IPM Integrated Pest Management
IRIS Integrated Risk Information System

Acronym List

LGACLocal Government Advisory CouncilLUSTLeaking Underground Storage TanksMACTMaximum Achievable Control TechnologyNAAQSNational Ambient Air Quality Standards

NCP National Oil and Hazardous Substance Pollution Contingency Plan

NEJAC National Environmental Justice Advisory Council
NHTSA National Highway Traffic Safety Administration
NPDES National Pollution Discharge Elimination System

NEA Nuclear Energy Agency

NEPA National Environmental Policy Act

NHTSA National Highway Transportation Safety Administration

NOA New Obligation Authority

NOAA National Oceanic and Atmospheric Administration

NPL National Priority List

NRF National Response Framework
OMB Office of Management and Budget
PALs Plant-wide Applicability Limits

NVFEL National Vehicle and Fuel Emissions Laboratory

PCBs Polychlorinated Biphenyls

PFAS Per- and Polyfluoroalkyl Substances

P2 Pollution Prevention

PRIA Pesticide Registration Improvement Extension Act

PRP Potentially Responsible Parties RAU Ready for Anticipated Use

RCRA Resource Conservation and Recovery Act
RERT Radiological Emergency Response Team

RMP Risk Management Plan SDWA Safe Drinking Water Act

SDWIS Safe Drinking Water Information System

SF Hazardous Substance Superfund
SHC Sustainable and Healthy Communities

SIP State Implementation Plan SNC Significant Noncompliance

SPCC Spill Prevention, Control and Countermeasure

SRF State Revolving Fund

StRAPStrategic Research Action PlanSSWRSafe and Sustainable Water ResourcesSTAGState and Tribal Assistance Grants

STAR Science to Achieve Results
TIP Tribal Implementation Plan
TMDL Total Maximum Daily Load
TRI Toxics Release Inventory
TSCA Toxic Substances Control Act

UCMR Unregulated Contaminant Monitoring Rule (UCMR)

UIC Underground Injection Control
USDA U.S. Department of Agriculture
UST Underground Storage Tanks
VIDA Vessel Incidental Discharge Act

WCF Working Capital Fund WHO World Health Organization

WIFIA Water Infrastructure Finance and Innovation Act
WIIN Water Infrastructure Improvement for the Nation Act

WIPP Waste Isolation Pilot Plant



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