



**United States
Environmental Protection Agency**

FISCAL YEAR 2019

**Justification of Appropriation
Estimates for the Committee
on Appropriations**

Goal and Objective Overviews

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**Environmental Protection Agency
2019 Annual Performance Plan and Congressional Justification**

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**Environmental Protection Agency
FY 2019 Annual Performance Plan and Congressional Justification**

GOAL, APPROPRIATION SUMMARY

Budget Authority
(Dollars in Thousands)

	<u>FY 2017 Actuals</u>	<u>FY 2018 Annualized CR</u>	<u>FY 2019 Pres Budget</u>
Core Mission	\$6,041,166.2	\$5,891,427.0	\$4,533,387.0
Science & Technology	\$175,032.9	\$167,710.0	\$125,901.0
Environmental Program & Management	\$1,491,381.3	\$1,456,110.0	\$712,825.0
Inland Oil Spill Programs	\$14,422.5	\$14,311.0	\$12,273.0
Hazardous Substance Superfund	\$808,488.7	\$747,116.0	\$752,091.0
Leaking Underground Storage Tanks	\$90,180.6	\$89,040.0	\$45,292.0
State and Tribal Assistance Grants	\$3,453,147.1	\$3,401,052.0	\$2,865,005.0
Hazardous Waste Electronic Manifest System Fund	\$4,915.4	\$3,156.0	\$0.0
Water Infrastructure Finance and Innovation Fund	\$3,597.7	\$12,932.0	\$20,000.0
Cooperative Federalism	\$317,037.4	\$316,713.0	\$217,148.0
Environmental Program & Management	\$219,223.2	\$221,789.0	\$158,120.0
Inland Oil Spill Programs	\$145.2	\$138.0	\$0.0
Hazardous Substance Superfund	\$2,353.0	\$2,209.0	\$988.0
State and Tribal Assistance Grants	\$95,316.0	\$92,577.0	\$58,040.0
Rule of Law and Process	\$1,898,819.1	\$1,888,357.0	\$1,615,812.0
Science & Technology	\$548,543.5	\$541,265.0	\$323,064.0
Environmental Program & Management	\$928,555.0	\$924,110.0	\$867,907.0
Inspector General	\$41,053.7	\$41,207.0	\$37,475.0
Building and Facilities	\$32,184.7	\$34,233.0	\$39,553.0
Inland Oil Spill Programs	\$3,372.4	\$3,636.0	\$3,400.0
Hazardous Substance Superfund	\$333,857.7	\$332,049.0	\$335,751.0
Leaking Underground Storage Tanks	\$1,962.8	\$2,277.0	\$2,240.0
State and Tribal Assistance Grants	\$9,289.3	\$9,580.0	\$6,422.0
<i>Sub-Total</i>	<i>\$8,257,022.7</i>	<i>\$8,096,497.0</i>	<i>\$6,366,347.0</i>
Cancellation of Funds	\$0.0	-\$90,348.0	-\$220,460.0
TOTAL, EPA	\$8,257,022.7	\$8,006,149.0	\$6,145,887.0

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GOAL, APPROPRIATION SUMMARY

Authorized Full-time Equivalents (FTE)

	<u>FY 2017 Actuals</u>	<u>FY 2018 Annualized CR</u>	<u>FY 2019 Pres Budget</u>
Core Mission	7,101.9	7,200.5	5,809.4
Science & Technology	522.3	530.6	456.9
Environmental Program & Management	4,861.2	5,028.0	3,622.3
Inland Oil Spill Programs	78.0	83.1	62.3
Hazardous Substance Superfund	1,426.5	1,348.2	1,339.2
Leaking Underground Storage Tanks	41.9	45.7	33.6
State and Tribal Assistance Grants	4.9	0.0	0.0
Hazardous Waste Electronic Manifest System Fund	8.0	7.9	10.0
Water Infrastructure Finance and Innovation Fund	9.6	12.0	12.0
Rereg. & Exped. Proc. Rev Fund	82.6	145.0	221.5
Cooperative Federalism	1,150.6	1,228.1	831.0
Environmental Program & Management	1,142.2	1,219.1	827.8
Inland Oil Spill Programs	0.7	0.9	0.0
Hazardous Substance Superfund	5.7	6.1	1.2
WCF-Reimbursable	2.0	2.0	2.0
Rule of Law and Process	6,572.0	6,979.5	5,609.9
Science & Technology	1,614.7	1,669.1	1,035.5
Environmental Program & Management	3,365.1	3,511.1	2,881.5
Inspector General	219.0	268.0	201.4
Inland Oil Spill Programs	13.7	14.3	13.4
Hazardous Substance Superfund	1,211.2	1,309.3	1,250.2
Leaking Underground Storage Tanks	6.6	8.4	7.1
Rereg. & Exped. Proc. Rev Fund	1.2	0.0	0.0
WCF-Reimbursable	140.4	199.3	209.8
TOTAL, EPA	14,824.5	15,408.1	12,250.3

**Environmental Protection Agency
FY 2019 Annual Performance Plan and Congressional Justification**

Core Mission

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

STRATEGIC OBJECTIVES:

- Work with states and tribes to accurately measure air quality and ensure that more Americans are living and working in areas that meet high air quality standards.
- Ensure waters are clean through improved water infrastructure and, in partnership with states and tribes, sustainably manage programs to support drinking water, aquatic ecosystems, and recreational, economic, and subsistence activities.
- Provide better leadership and management to properly cleanup contaminated sites to revitalize and return the land back to communities.
- Effectively implement the Toxics Substances Control Act, and the Federal Insecticide, Fungicide, and Rodenticide Act, to ensure new and existing chemicals and pesticides are reviewed for their potential risks to human health and the environment and actions are taken when necessary.

GOAL, OBJECTIVE SUMMARY

Budget Authority
Full-time Equivalents
(Dollars in Thousands)

	FY 2017 Actuals	FY 2018 Annualized CR	FY 2019 Pres Budget	FY 2019 Pres Budget v. FY 2018 Annualized CR
Core Mission	\$6,041,166.2	\$5,891,427.0	\$4,533,387.0	-\$1,358,040.0
Improve Air Quality	\$715,084.9	\$759,177.0	\$409,589.0	-\$349,588.0
Provide Clean and Safe Water	\$3,764,751.7	\$3,640,714.0	\$2,866,257.0	-\$774,457.0
Revitalize Land and Prevent Contamination	\$1,327,484.0	\$1,258,401.0	\$1,095,896.0	-\$162,505.0
Ensure Safety of Chemicals in the Marketplace	\$233,845.6	\$233,135.0	\$161,645.0	-\$71,490.0
Total Authorized Workyears	7,101.9	7,200.5	5,809.4	-1,391.1

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 2017 Enacted Budget	FY 2018 Annualized CR	FY 2019 President’s Budget	Delta FY 2019 - FY 2018
1.1 Improve Air Quality	\$764,367	\$759,177	\$409,589	(\$349,588)
1.2 Provide Clean and Safe Water	\$3,662,587	\$3,640,714	\$2,866,257	(\$774,457)
1.3 Revitalize Land and Prevent Contamination	\$1,267,005	\$1,258,401	\$1,095,896	(\$162,505)
1.4 Ensure Safety of Chemicals in the Marketplace	\$234,727	\$233,135	\$161,645	(\$71,490)
Goal 1 Total	\$5,928,686	\$5,891,427	\$4,533,387	(\$1,358,040)
Total Workyears	7,200.5	7,200.5	5,809.4	(1,391.1)

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

Introduction

Pollution comes in many forms with myriad impacts on human health and the environment. With the goal of clean and safe air, water, and land for all Americans, as well as safe chemicals, Congress enacted a range of environmental statutes that spell out EPA’s core 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 hidden 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 2019, the Agency will work with states and tribes to more rapidly take action on their implementation plans for attaining air quality standards, reducing contaminants 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. The Agency will focus on advancing the cleanup of Superfund and brownfields sites, and will use a list of top priority sites to make progress on Superfund sites of particular concern. EPA’s top priority for ensuring the safety of chemicals in the marketplace is the implementation of the new Frank R. Lautenberg Chemical Safety for the 21st Century Act, which modernizes the Toxic Substances and 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 use of the best available science and research to address current and future environmental hazards, develop new approaches, and improve the foundation for decision making.

In FY 2019, EPA also proposes two new voluntary user fees programs to improve regulatory compliance in industry, and one new user fee to fund the ENERGY STAR program.

The Agency will collaborate more efficiently and effectively with other federal agencies, states, tribes, local governments, communities, and other partners and stakeholders to address existing pollution and prevent future problems. EPA will directly implement federal environmental laws in Indian country where eligible tribes have not taken on 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. Some low-income and minority communities may face greater risks because of proximity to contaminated sites or because fewer resources are available to avoid exposure to pollutants. Tribal ways of life such as traditional subsistence hunting, fishing, and gathering also may increase exposure to contaminants and increase risks. Much work remains and, together with our partners, we will continue making progress in protecting human health and the environment.

Agency Priority Goals

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

- APG-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.
- APG-2: 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).
- APG-3: 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).
- APG-4: 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.

FY 2019 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.

As part of its mission to protect human health and the environment, EPA is dedicated to working in partnership with states to reduce the number of nonattainment areas in the United States. From 1970 to 2016, aggregate national emissions of the six criteria air pollutants¹ were reduced 73 percent, while Gross Domestic Product grew by over 253 percent.² Despite this progress, in 2016, more than 120 million people (about 40 percent of the U.S. population based on 2010 census data) lived in counties with monitored air quality that did not meet standards for at least one criteria pollutant. 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.

EPA requests \$410 million and 1,235.8 FTE in FY 2019 to improve air quality. This strategic objective is supported by core air program work highlighted below.

National Ambient Air Quality Standards (NAAQS) Implementation

EPA's criteria pollutant program is critical to continued progress in reducing public health risks and improving the quality of the environment. However, listening to and working with state and tribal partners to set and implement standards is key. The criteria pollutant program sets NAAQS which are then implemented by state, local and tribal air agencies who have primary responsibility under the Clean Air Act (CAA) for developing clean air plans.

In FY 2019, 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 requirements; reviewing state/tribal implementation plans; taking federal oversight actions such as approving state implementation plan/tribal implementation plan (SIP/TIP) submittals consistent with statutory obligations; developing regulations and guidance to implement standards; and addressing transported air pollution. EPA will focus on ways to improve the efficiency and effectiveness of the SIP/TIP process, including the Agency's own review process, with a goal of maximizing timely processing of state/tribal-requested implementation plan actions to help move more quickly to attainment.

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. EPA reviews air toxics emissions standards, required every eight years under the

¹ 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.

² https://gispub.epa.gov/air/trendsreport/2017/#growth_w_cleaner_air

CAA, to determine if additional emission control technologies exist and, if so, EPA proposes more effective emission control technologies based on these reviews.

In FY 2019, 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 risk assessments to determine whether the Maximum Achievable Control Technology rules appropriately protect public health as required by Section 112 of the CAA.

Federal Vehicle and Fuels Standards and Certification Program

EPA develops, implements, and ensures compliance with national emission standards to reduce mobile source related air pollution from light-duty cars and trucks, heavy-duty trucks and buses, nonroad engines and vehicles, and from 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 2019, the budget requests \$75.1 million for the Federal Vehicle and Fuels Standards and Certification program, which will focus its efforts on prioritizing certification decisions to ensure that manufacturers are able to enter their engines and vehicles into commerce once their products have been certified. 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.

Atmospheric Protection Program (Previously the Climate Protection Program in FY 2017 Enacted)

EPA implements the U.S. Greenhouse Gas Reporting 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 reporters. The data are shared with industry stakeholders, state and local governments, the research community, and the public to better understand emissions, inform opportunities, and communicate progress of actions. They also inform 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 2019, the budget requests \$13.5 million to continue to implement the Atmospheric Protection program.

ENERGY STAR Fee Proposal

The FY 2019 budget request includes a proposal to authorize EPA to administer the ENERGY STAR program through the collection of user fees. 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 them 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. Through an upfront FY 2019 appropriation of \$46 million to ensure continuous operation of the ENERGY STAR program, fee collections would begin after EPA undertakes a rulemaking process to determine what aspects of the program could be covered by fees and the level of fees, and to ensure that a fee system would not discourage entities from participating in the program or result in a loss of environmental benefits. The fee

collections would provide funding to replace to the extent allowable the upfront appropriation to cover, 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).

The Agency also has specific statutory responsibilities to protect the public from harmful radiation under its radiation protection program through its federal guidance and standard-setting activities, including: regulatory oversight at the Department of Energy's Waste Isolation Pilot Plant (WIPP);³ 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 2019, 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 RadNet, the Agency's fixed ambient environmental radiation monitoring network for the U.S.

Grants for State, Local and Tribal Air Quality Management

For FY 2019, EPA requests \$161 million to provide federal support for grants to state and local air quality management agencies and tribes where applicable, to manage and implement air quality control programs. In FY 2019, states will continue to be 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, for research, and for the public.

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.

Providing support to ensure safe drinking water in communities, protecting surface water, and increasing water infrastructure project investment 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 over 90 percent of the population served by community water systems

³ Additional information at: <http://www.epa.gov/radiation/wipp/background.html>.

receives safe drinking water, and formerly impaired waters have been restored and now support recreational and public health uses that contribute to healthy economies.

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 its infrastructure programs (e.g., the drinking water SRF, clean water SRF, 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 that it is serving disadvantaged communities, leveraging private investment to improve the economy, and protecting human health and the environment.

In FY 2019, 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 Safe Drinking Water Act (SDWA). The Agency will look to provide states and tribes with flexibility to best address their particular priorities. FY 2019 resources requested include \$2.9 billion and 1,530.5 FTE to support this objective. This strategic objective is supported by core water program work highlighted below.

Water Infrastructure Investments

We have made significant progress since enactment of the CWA, 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 both drinking water and wastewater infrastructure and 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.

A top priority for EPA is modernizing the outdated water infrastructure on which the American public depends. These funding levels are for critical drinking water and wastewater infrastructure and further the President's ongoing commitment to infrastructure repair and replacement. These resources also would allow states, municipalities, and private entities to continue to finance high priority infrastructure investments that achieve or maintain compliance and protect human health and the environment. The FY 2019 budget requests \$2.3 billion for the State Revolving Funds and \$20 million for the Water Infrastructure Finance and Innovation Act (WIFIA) program. WIFIA is expected to leverage significant funding for infrastructure and could provide up to \$2 billion in direct credit assistance, which, when combined with other funding sources, could help to spur up to \$4 billion in total infrastructure investment.⁴

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 State Revolving Funds (SRFs), the new 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

⁴ This approximation is based on notional calculations. Subsidy cost is determined on a loan-by-loan basis.

financing mechanism and, as demonstrated by the first round of applications and selected projects, the program encourages a wide variety of finance approaches.⁵

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 addition to the SRFs, in FY 2019, 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 (Sec. 106), Underground Injection Control, 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 particular priorities. Funding for the categorical grants to states and tribes to support core water programs is \$265 million, including an additional \$27 million for the new Multipurpose Grant program, which can be used for any required statutory responsibility.

Safe Drinking Water

For FY 2019, EPA requests \$84 million for Drinking Water Programs, including drinking water programs funded under the Science and Technology appropriation. EPA will work to reduce lead risks by developing proposed revisions to the Lead and Copper Rule and to develop regulations to implement the Water Infrastructure Improvement for the Nation Act 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. In addition, EPA will continue work with states to develop the next generation Safe Drinking Water Information System tool used by the majority of state drinking water programs. The tool will provide the following benefits: 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

For FY 2019, EPA requests \$175 million for Surface Water Protection and \$18 million for Wetlands. The FY 2019 budget supports the following core Surface Water Protection program components: water quality criteria, standards and technology-based effluent guidelines; National Pollutant Discharge Elimination System; water monitoring; Total Maximum Daily Loads; watershed management; water infrastructure and grants management; core wetlands programs and CWA Section 106 program management.

Homeland Security

In FY 2019, 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 train on an annual basis over 2,500 water utilities, state officials, and federal emergency responders to become more resilient to any natural or manmade incident that could endanger water and

⁵ <https://www.epa.gov/wifia/wifia-fy-2017-letters-interest-and-selected-projects>.

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 2019, EPA will conduct nationwide, in-person training sessions in cybersecurity threats and countermeasures for about 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.

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 2019, the Agency is prioritizing the accelerated pace of cleanups and reuse while addressing risks to human health and the environment. Collaborating with and effectively leveraging efforts of other federal agencies, industry, states, tribes, and local communities, EPA uses its resources to enhance the livability and economic vitality of neighborhoods in and around hazardous waste sites. EPA partners with states, tribes and industry to prevent and reduce exposure to contaminants. Superfund and the Resource Conservation and Recovery Act (RCRA) provide legal authority for EPA’s work to protect and restore the 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 to reach its goals 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. EPA’s efforts are guided by scientific data, tools, and research that alert us to emerging issues and inform decisions on managing materials and addressing contaminated properties.

For FY 2019, EPA requests \$1.10 billion and 2,045.5 FTE to support this objective, 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 Tank 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 well-being of communities. To this end, EPA has established four strategic measures within the FY 2018-2022 EPA Strategic Plan to make additional Superfund, Brownfields, RCRA

Corrective Action and Leaking Underground Storage Tanks (LUST) sites ready for anticipated use. For FY 2019, EPA requests \$865 million to fund EPA's cleanup programs.

Superfund Remedial

One of EPA's top priorities is accelerating progress on Superfund sites. EPA convened a Superfund Task Force that identified 42 recommendations to streamline and improve the Superfund process. These recommendations and other innovative ideas will be considered and applied to Superfund sites with priority given to addressing sites on the National Priorities List (NPL).⁶

Building on recommendations from the Superfund Task Force Report, the Agency will continue to help communities clean up and revitalize once productive properties 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: 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.⁷

Superfund Removal

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, and promotes the redevelopment of blighted areas. Over the last 10 years (FY 2007 – FY 2016), EPA completed or oversaw over 3,655 Superfund removal actions across the country. This work is all performed as part of the overarching effort to clean up contaminants and protect human health and the environment. Superfund properties are often reused as commercial facilities, retail centers, government offices, residential areas, industrial and manufacturing operations, parks, and recreational areas. The reuse of a site often can play a role in economically revitalizing a community. As of FY 2017, EPA data shows that at 487 Superfund sites in reuse, approximately 6,622 businesses are generating \$43.6 billion in sales and employ more than 156,352 people who earn a combined income of \$11.2 billion.⁸

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

⁶ Please see the Superfund Task Force Recommendations at https://www.epa.gov/sites/production/files/2017-07/documents/superfund_task_force_report.pdf.

⁷ 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.

⁸ For more information on Redevelopment Economics and in depth case studies see www.epa.gov/superfund-redevelopment-initiative/redevelopment-economics-superfund-sites.

people from exposure to hazardous substances. EPA's 24-hour-a-day response capability is a cornerstone element of the National Contingency Plan.⁹

RCRA Corrective Action

EPA works in partnership with states, having authorized 44 states and one territory to directly implement the RCRA Corrective Action program¹⁰. 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, consequently, the Agency serves as lead or support for a significant number of complex and challenging cleanups in both non-authorized and authorized states.

Underground Storage Tanks

The Underground Storage Tank (UST) program has achieved significant success in addressing releases since the beginning of the program. End of year FY 2017 data shows that, of the approximately 538,000 releases reported since the beginning of the UST program in 1988, more than 469,000 (or 87 percent) have been cleaned up. Approximately 68,000 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.¹¹ 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.¹² A total of \$50.9 million is being requested in FY 2019 for Underground Storage Tank direct cleanup and state cooperative agreements.

Brownfields

By awarding Brownfields grants, EPA is making investments in communities so that they can realize their own visions for environmental health, economic growth, and job creation. Approximately 129 million people (roughly 40 percent of the U.S. population) live within three miles of a Brownfields site that receives EPA funding.¹³ As of the end of FY 2017, grants awarded by the program have led to over 69,200 acres of idle land made ready for productive use and over 129,240 jobs and \$24.7 billion leveraged. In FY 2019, the Agency will continue to make additional brownfields sites ready for anticipated use (RAU) through performance goals established under

⁹ For additional information, refer to: <https://www.epa.gov/emergency-response/national-oil-and-hazardous-substances-pollution-contingency-plan-ncp-overview>.

¹⁰ State implementation of the RCRA Corrective Action program is funded through the STAG (Program Project 11) and matching State contributions.

¹¹ Sullivan, K. A. and A. Kafle. Do more frequent inspections improve compliance? Evidence from underground storage tank facilities in Louisiana. Office of Communications, Partnerships and Analysis (OCPA) Working Paper No. 2017-05. May 2017. https://www.epa.gov/sites/production/files/2017-06/documents/olem_ocpa_working_paper_do_more_frequent_inspections_improve_compliance.pdf.

¹² Guignet, Dennis, Robin Jenkins, Matthew Ranson, and Patrick Walsh, "Contamination and Incomplete Information: Bounding Implicit Prices using High-Profile Leaks," *Journal of Environmental Economics and Management*, Forthcoming.

¹³ 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.

the FY 2018-2022 EPA Strategic Plan.¹⁴ A 2017 study found that housing property values increased 5 to 15.2 percent near brownfield sites when cleanup was completed.¹⁵

Preserving Land

Preventing the release of contamination 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.

Chemical Facility Safety

The FY 2019, EPA requests \$10.0 million for the State and Local Prevention and Preparedness program. 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 composed of federal, state, local, and tribal partners who work together with industry to protect emergency responders, local communities, and property from chemical risks through advanced technologies, community and facility engagement, and improved safety systems. In FY 2019, the program will inspect Risk Management Plan facilities to ensure compliance with accident prevention and preparedness activities.

State and Local Prevention and Preparedness Fee Proposal

The budget includes a new fee proposal in the State and Local Prevention and Preparedness program to better support compliance assistance work for RMP facilities. The new voluntary fee and service will provide support for facilities in complying with EPA regulations via an on-site walk-through and assistance. Authorizing language for the new fee collection accompanies the budget submission.

RCRA Waste Management

The FY 2019 budget provides \$41.9 million to the RCRA Waste Management program. States have primary responsibility for almost all of the efforts related to permitting hazardous waste units (such as incinerators and landfills) at treatment, storage, and disposal facilities. In FY 2019, permits for these activities will be issued, updated, or maintained. 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.

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 five million manifest forms accompanying hazardous waste shipments across the nation annually. When fully implemented, the electronic hazardous waste manifest program will reduce the reporting burden for industry by approximately \$75 million annually. In addition, the

¹⁴ EPA's ACRES database.

¹⁵ 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.

e-Manifest system will improve knowledge of waste generation and final disposition, enhanced access to manifest information, and provide greater transparency for the public about hazardous waste shipments. In FY 2019, EPA will operate the E-Manifest system and the Agency will collect and utilize fees for the 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 2019, EPA requests a total of \$12.3 million for the Oil Spill Prevention, Preparedness and Response program.

Oil Spill Prevention, Preparedness and Response Fee Proposal

The budget includes a new fee proposal 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. The new voluntary fee and service will provide support for facilities in complying with EPA regulations via an on-site walk-through and assistance. Authorizing language for the new fee collection accompanies the budget submission.

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 2019 budget includes \$31.8 million to maintain Agency capability to respond to incidents that may involve harmful CBR substances. Resources also will allow the Agency to develop and maintain expertise and operational readiness for all phases of consequence management following a CBR incident and sustain specialty equipment such as the Airborne Spectral Photometric Environmental Collection Technology (ASPECT) plane and Portable High-throughput Integrated Laboratory Identification (PHILIS) units.

Objective 4: Ensure Safety of Chemicals in the Marketplace. Effectively implement the Toxics 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.

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 chemicals and pesticides and implements risk management strategies when needed. EPA's research efforts will help advance the Agency's ability to assess chemicals more rapidly and accurately. In FY 2019, EPA's request for Ensuring the Safety of Chemicals in the Marketplace is \$161.6 million and 997.6 FTE.

Toxic Substances Control Act (TSCA)

In 2016, TSCA was amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act. These amendments give EPA significant new, as well as continuing, responsibilities for ensuring that chemicals in or entering commerce do not present unreasonable risks to human health and the environment, including unreasonable risks to potentially exposed or susceptible subpopulations. EPA works to ensure the safety of: (1) existing chemicals (those already in use when TSCA was first enacted in 1976 and those that have entered commerce following new chemical review by EPA), by obtaining and evaluating chemical data and by 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 on track to complete risk evaluations for an initial set of ten chemicals in accordance with statutory timelines. The Agency published Scoping Documents for these evaluations on schedule in June 2017. On the new chemicals front, the Agency has eliminated a backlog of 300 new chemical cases under review when TSCA was amended on June 22, 2016 as well as a smaller number of cases submitted thereafter. In FY 2019, increased resources will support the Agency's significant continuing and new responsibilities under the TSCA for ensuring that new and existing chemicals are evaluated in a timely manner and that any unreasonable risks are addressed.

Implementation of the 2016 amendments to TSCA is one of EPA's top priorities. In FY 2019, \$58.6 million is proposed to be allocated to the TSCA Chemical Risk Review and Reduction Program. EPA will use these resources to meet the statutory requirements and deadlines of TSCA, as amended. The Act also authorized a sustainable source of funding for EPA to carry out its new responsibilities. The Agency will now be able to collect user fees from chemical manufacturers and processors to defray 25 percent of its costs for administering certain sections¹⁶ of TSCA, as amended.¹⁷ The funded activities also will support the Agency's efforts to meet the strategic targets set out in EPA's FY 2018-2022 Strategic Plan.

In FY 2019, the Agency will initiate risk management actions to address any unreasonable risks identified by the completed chemical risk evaluations and will finalize those actions within two years, with the possibility of an extension of up to two additional years, as required by law. Risk management actions may include prohibiting or restricting the manufacture, processing, distribution in commerce or commercial use of a chemical, and imposing requirements on labeling or recordkeeping. EPA also will carry out the new fast-track process to address certain Persistent, Bioaccumulative and Toxic chemicals within the period prescribed by law.

Toxic Release Inventory (TRI)

EPA's success in carrying out its mission to protect human health and the environment is contingent on collecting timely, high-quality and relevant information. The Toxics Release Inventory (TRI) program supports EPA's mission, and its chemical safety program in particular,

¹⁶ The costs of implementing TSCA (as amended) Sections 4, 5 and 6 are defrayable up to the statutory caps, as are the costs of collecting, processing, reviewing and providing access to and protecting from disclosure, as appropriate, chemical information under Section 14.

¹⁷ The authority to assess fees is conditioned on appropriations for the CRRR Program, excluding fees, being held at least equal to the amount appropriated for FY 2014.

by annually releasing to the public data reported by industrial and federal facilities on the quantity of toxic chemicals they release and other waste management (e.g., recycling) and pollution prevention practices. These data pertain to over 650 toxic chemicals from approximately 20,000 industrial and federal facilities. The TRI Program is a primary source of toxic chemical release data for communities, non-governmental organizations, industrial facilities, academia and government agencies. The Agency supports these activities through targeted enhancements to its systems for managing information flows and scientific tools and models.

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, taking into account the economic, social, and environmental costs and benefits of the uses of the pesticides. Each time the law was amended, Congress has strengthened FIFRA's safety standards while continuing to require consideration of pesticide benefits.

Every 15 years, EPA reevaluates pesticides that were previously registered to ensure that they meet current standards. EPA's Pesticides program remains on track to meet the statutory completion date for this 15-year Registration Review period, October 1, 2022. Forward planning serves to ensure that, through 2022, EPA will complete all FIFRA mandated decisions for the Pesticides Registration Review Program. At the end of FY 2017, 239 interim or final decisions of a known universe of 725 cases were completed. Through PRIA, the program continues to ensure that 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 tries 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 2019, \$93.3 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 2019, appropriated funding will be augmented by approximately \$48 million in Pesticides registration and maintenance user fees, as authority to collect fees is expected to be reauthorized by PRIA IV legislation which is currently being considered by Congress.

In FY 2019, 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 be reviewing, under the registration review program, pesticides that are already in the market against current scientific standards for human health. EPA's FY 2019 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 also 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 also will continue to emphasize reducing exposures from pesticides used in and around homes, schools, and other public areas.

**Environmental Protection Agency
FY 2019 Annual Performance Plan and Congressional Justification**

Cooperative Federalism

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

STRATEGIC OBJECTIVES:

- Improve environmental protection through shared governance and enhanced collaboration with state, tribal, local, and federal partners using the full range of compliance assurance tools.
- Listen to and collaborate with impacted stakeholders and provide effective platforms for public participation and meaningful engagement.

GOAL, OBJECTIVE SUMMARY

Budget Authority
Full-time Equivalents
(Dollars in Thousands)

	FY 2017 Actuals	FY 2018 Annualized CR	FY 2019 Pres Budget	FY 2019 Pres Budget v. FY 2018 Annualized CR
Cooperative Federalism	\$317,037.4	\$316,713.0	\$217,148.0	-\$99,565.0
Enhance Shared Accountability	\$300,972.1	\$300,825.0	\$215,148.0	-\$85,677.0
Increase Transparency and Public Participation	\$16,065.3	\$15,888.0	\$2,000.0	-\$13,888.0
Total Authorized Workyears	1,150.6	1,228.1	831.0	-397.1

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 2017 Enacted Budget	FY 2018 Annualized CR	FY 2019 President's Budget	Delta FY 2019 – FY 2018
2.1 Enhance Shared Accountability	\$302,882	\$300,825	\$215,148	(\$85,677)
2.2 Increase Transparency and Public Participation	\$15,997	\$15,888	\$2,000	(\$13,888)
Goal 2 Total	\$318,879	\$316,713	\$217,148	(\$99,565)
Total Workyears	1,228.1	1,228.1	831.0	(397.1)

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

Introduction:

The idea that environmental protection is a shared responsibility between the states, tribes, and the federal government is embedded in our environmental laws, which in many cases provide states and tribes the opportunity and responsibility for implementing environmental 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 environmental programs within their jurisdictions in lieu of EPA-administered federal programs. Specifically, states have assumed more than 96 percent of the delegable authorities under federal law.¹⁸ EPA retains responsibility for directly implementing federal environmental programs in much of Indian country where eligible tribes have not taken on program responsibility. There are also programs that by statute may not be delegated to the states or tribes. Recognizing these evolving responsibilities, EPA will facilitate constructive dialogue with states and tribes to ensure maximum utilization of resources. EPA will adapt its practices to reduce duplication of effort with authorized states and tribes, and tailor its oversight of delegated programs.

Cooperative federalism – the relationship between states, tribes and EPA – is not just about who makes decisions, but about how decisions are made and a sense of shared accountability to provide positive environmental results. EPA understands that improvements to protecting human health and the environment cannot be achieved by any actor operating alone, but only when the states, tribes, 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 work from a foundation of transparency, early collaboration – including public participation – and a spirit of shared accountability for the outcomes of this joint work. This foundation involves active platforms for public participation, including building the capacity of the most vulnerable community stakeholders to provide input. With these public participation opportunities, the beneficiaries of environmental protection – the American people – will be able

¹⁸ Environmental Council of the States (ECOS) Paper, "[Cooperative Federalism 2.0](#)," June 2017.

to more meaningfully engage through their communities, their local governments, and their state and tribal governments. Including the public's voice in EPA's policy, regulatory, and assistance work, particularly the voices of the most vulnerable to environmental and public health challenges among us, is essential to meeting their needs as the Agency implements its statutory responsibilities.

EPA also recognizes that meeting the needs of states, tribes, local governments, and communities, and achieving environmental improvements cannot be done in isolation from economic growth. Opportunities for prosperous economic growth and clean air, water, and land are lost without effective infrastructure investments that align with 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 leading to 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 have greatly multiplied the federal investment. EPA estimates that for every federal dollar contributed thus far the nation has received close to three dollars of investment in water infrastructure. EPA will optimize and align its relevant programs to catalyze other resources, support beneficial infrastructure investments, and meet community needs for thriving economies and improved environmental and human health outcomes.

FY 2019 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.

In the spirit of cooperative federalism, EPA and its partners have made enormous progress in protecting air, water, and land resources. EPA recognizes that states and tribes vary in the environmental challenges that they face due to variations in geography, population density, and other factors. EPA will maximize the flexibilities provided by law to take each state's unique situation into account when making regulatory and policy decisions. Multipurpose Grants are an example of this commitment to cooperative federalism. These grants will allow flexibility for our state and tribal partners by allowing them to target funds to their highest priority statutory responsibilities. EPA also directly implements the majority of federal environmental programs in Indian country. The Agency actively works with tribes to develop their capacity to administer environmental programs and to enable tribes that choose to implement federal environmental laws and programs for their lands. 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 in protecting and improving human health and the environment.

EPA recognizes the advances states and tribes have made in implementing environmental laws and programs. This Administration will undertake a series of initiatives to rethink and assess where we are and where we want to be with respect to shared governance. These initiatives will clarify the Agency's statutory roles and responsibilities and tailor state and tribal oversight to maximize our return on investment and reduce burden on states and tribes, while ensuring continued progress in meeting environmental laws.

In addition, EPA, with its state, tribal, and local partners, ensures consistent and fair enforcement of federal environmental laws and regulations. The Agency works jointly with its co-regulators to protect human health and the environment, using a full set of compliance assurance tools, such as compliance assistance and monitoring; electronic reporting; traditional enforcement; grants to states and tribes; and tribal capacity building. EPA is building on progress made using E-Enterprise for the Environment, a plat form for transformative change that operationalizes cooperative federalism principles. EPA's E-Enterprise partnership with states and tribes modernizes the way we do the business of environmental protection.

EPA directly implements the majority of federal environmental programs in Indian country. The Agency actively works with tribes to develop their capacity to administer environmental programs and to enable tribes that choose to implement federal environmental laws and programs for their lands. Consistent with the 1984 Indian Policy and EPA policies on consultation and treaty rights¹⁹, EPA will work on a government-to-government basis to build tribal capacity to implement federal programs through delegations, authorizations, and primacy designations to enable tribes to meaningfully participate in the Agency's policy making, standard setting, and direct implementation activities under federal environmental statutes. For FY 2019, EPA requests \$217 million and 831 FTE to help enhance EPA's shared accountability and build cooperative federalism.

Shared Governance

To develop a future model of shared governance that takes into account the progress states and tribes have made in protecting human health and the environment, the Agency will undertake an analysis of EPA's statutory roles and responsibilities to determine the Agency direction in light of priorities. The Agency will work with states and tribes to find approaches to shared governance, which provide flexibility and streamline oversight of state and tribal programs. As part of this process, the Agency will seek to understand which approaches currently are working well for state, tribal and local co-regulators. EPA will pilot new approaches to oversight (e.g., permit reviews) where we have the legal flexibility to do so and streamline those processes by which EPA reviews and approves state and tribal actions. EPA will continue to work with states and tribes through E-Enterprise, focused on how we work and plan together, agree on priorities, and allocate roles and responsibilities to update processes and programs. Through shared governance – engaging early and meaningfully with states and tribes – the Agency will use E-Enterprise to deliver streamlined processes as well as accessible, reliable information and data that benefit co-regulators and the regulated community.

¹⁹ “EPA Policy for the Administration of Environmental Programs on Indian Reservations,” “EPA Policy on Consultation and Coordination with Indian Tribes,” and “EPA Policy on Consultation and Coordination with Indian Tribes: Guidance for Discussing Tribal Treaty Rights.”

Compliance Assurance

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 (e.g., e-permitting and reporting). It also provides information for the regulated community (e.g., compliance assistance information). Tools and services are designed to enhance efficiency, reduce burden on the regulated community, and improve environmental outcomes. EPA will expand its compliance assistance work by continuing to partner with third-party organizations and federal agencies to support the 17 existing web-based, sector-specific compliance assistance centers²⁰ and developing new centers. 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 states and regulated entities. EPA also is working closely with states and tribes to develop new compliance tools and approaches to make programs more effective and efficient in promoting compliance and remediating violations. Some of the Agency's ongoing collaborative efforts with the Environmental Council of the States (ECOS) include²¹ producing webinars to help identify new compliance approaches that EPA could pilot and evaluate; increasing availability of training; and preparing for advances in pollution monitoring technology.²²

A key component of EPA's overall compliance assurance program is compliance monitoring. Compliance monitoring allows the regulatory agencies to detect noncompliance and promote compliance with the nation's environmental laws. Effective targeting of compliance monitoring plays a central role in achieving the goals EPA has set for protecting human health and the environment. EPA, state, and tribal inspectors often provide regulated entities with compliance assistance during the inspection process. On a national level, EPA works closely with individual states, tribes, and state and tribal associations to develop, modernize, and implement national compliance monitoring strategies to ensure a level playing field for regulated entities across the country. EPA principally focuses compliance monitoring activities, such as field inspections, electronic reporting, and data analysis tools, for those programs that are not delegated to states and tribes. The Agency provides monitoring, program evaluations, and capacity building to support and complement authorized state, tribal, and local government programs. The Agency will work with its state and tribal partners to enhance compliance monitoring tools and increase the use of Lean practices. Through E-Enterprise for the Environment, EPA, states, tribes, and territories will collaborate to develop smart mobile tools to enhance the effectiveness and efficiency of state, tribal, and EPA inspectors, and support advanced monitoring technology. The FY 2019 budget requests includes \$87.4 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, EPA will work with international partners to address international sources of pollution, as well as the impacts of pollution from the United States on other countries and the global environment. Pollution impacts air, water, food crops, and food chains, and can accumulate in foods such as fish. In FY 2019, EPA

²⁰ For more information on compliance assistance centers, see <https://www.epa.gov/compliance/compliance-assistance-centers>.

²¹ For more information on OECA's collaboration with ECOS via E-Enterprise, see [Article: Advanced Monitoring Technology: Opportunities and Challenges. A Path Forward for EPA, States, and Tribes.](#)

²² For more information on a broader range of collaborations between OECA and ECOS, see [Compendia of Next Generation Compliance Examples in Water, Air, Waste, and Cleanup Programs.](#)

will continue to engage both bilaterally and through multilateral institutions to improve international cooperation to prevent and address the transboundary movement of pollution. This budget includes \$4.2 million to support the International Sources of Pollution program. EPA efforts will include working with international partners to strengthen environmental laws and governance to more closely align with U.S. standards and practices and to help level the playing field for 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.

EPA will strengthen its community-driven approach, which emphasizes public participation to better partner with states, tribes, and communities and to maximize the support and resources of the entire Agency to create tangible environmental results. The Agency will deploy its collective resources and expertise to collaborate with states, tribes, and communities and support locally-led, community-driven solutions to improved environmental protection and economic growth. EPA will increase transparency with industry, environmental groups and other stakeholders; and facilitate public participation, emphasizing cooperation and collaboration, especially at the early stages of Agency actions. This will provide a more comprehensive understanding of community needs.

The Agency also will coordinate better across its programs and with federal partners to ensure mutual efforts are aligned, including consideration of vulnerable groups and communities in decisions, and will reflect community needs in its actions and investments, recognizing that the needs of rural communities may not be the same as urban areas. Increasing transparency and public participation in EPA's work with other agencies 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 more efficiently and effectively. The Agency also will engage with regulated entities to identify reforms to more efficiently and effectively meet the nation's environmental goals.

EPA will meet community needs through public participation, building community capacity through grants, technical assistance, partnering, and meaningful engagement. The Agency will leverage recommendations provided by federal advisory committees, such as the National Environmental Justice Advisory Council (NEJAC), LGAC, and Children's Health Protection Advisory Committee (CHPAC), and focus on partnerships representing vulnerable populations, such as youth, the elderly, and low-income communities. 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 our work, we are requesting continued flexibility for subsidization of SRF loan to communities. Specifically, the Agency will engage with the focus communities identified by EPA regions to understand each community's goals and identify its environmental priorities and needs, recognizing that rural communities and more urban areas may have different priorities.

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 and 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.

The Agency will work to coordinate across the federal government, with EPA regional offices partnering with federal agencies in focus communities 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. The Agency also will continue leadership of and involvement in the Office of Management and Budget (OMB) Community Solutions Taskforce to better access and leverage resources from across federal agencies, and will 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.

EPA also will focus on enhancing 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 that it can support the timely searching and collection of electronically-stored information for purposes of responding to FOIA requests and other information needs in a cost-effective, sustainable manner.

**Environmental Protection Agency
FY 2019 Annual Performance Plan and Congressional Justification**

Rule of Law and Process

Rule of Law and Process: Administer the law, as Congress intended, to refocus the Agency on its statutory obligations under the law.

STRATEGIC OBJECTIVES:

- 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.
- Outline exactly what is expected of the regulated community to ensure good stewardship and positive environmental outcomes.
- Refocus the EPA's robust research and scientific analysis to inform policy making.
- Issue permits more quickly and modernize our permitting and reporting systems.
- Provide proper leadership and internal operations management to ensure that the Agency is fulfilling its mission.

GOAL, OBJECTIVE SUMMARY

Budget Authority
Full-time Equivalents
(Dollars in Thousands)

	FY 2017 Actuals	FY 2018 Annualized CR	FY 2019 Pres Budget	FY 2019 Pres Budget v. FY 2018 Annualized CR
Rule of Law and Process	\$1,898,819.1	\$1,888,357.0	\$1,615,812.0	-\$272,545.0
Compliance with the Law	\$408,698.8	\$401,843.0	\$364,326.0	-\$37,517.0
Create Consistency and Certainty	\$72,886.1	\$68,898.0	\$60,366.0	-\$8,532.0
Prioritize Robust Science	\$490,070.0	\$478,088.0	\$255,046.0	-\$223,042.0
Streamline and Modernize	\$37,821.7	\$38,058.0	\$29,021.0	-\$9,037.0
Improve Efficiency and Effectiveness	\$889,342.5	\$901,470.0	\$907,053.0	\$5,583.0
Total Authorized Workyears	6,572.0	6,979.5	5,609.9	-1,369.6

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 2017 Enacted Budget	FY 2018 Annualized CR	FY 2019 President's Budget	Delta FY 2019 - FY 2018
3.1 Compliance with the Law	\$404,590	\$401,843	\$364,326	(\$37,517)
3.2 Create Consistency and Certainty	\$69,370	\$68,898	\$60,366	(\$8,532)
3.3 Prioritize Robust Science	\$481,358	\$478,088	\$255,046	(\$223,042)
3.4 Streamline and Modernize	\$38,318	\$38,058	\$29,021	(\$9,037)
3.5 Improve Efficiency and Effectiveness	\$907,635	\$901,470	\$907,053	\$5,583
Goal 3 Total	\$1,901,271	\$1,888,357	\$1,615,812	(\$272,545)
Total Workyears	6,979.5	6,979.5	5,609.9	(1,789.4)

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

Introduction

EPA will seek 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 work cooperatively with states and tribes to ensure compliance with the law, as well as to create consistency and certainty for the regulated community. Of course, 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. Ensuring compliance with the law also ensures consistency and certainty for the regulated community so the Agency has a complete understanding of the impact of proposed actions on human health, the environment, and the economy, and a clear path and timeline to achieve that compliance. EPA's policies and rules will reflect common sense, consistent 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.

One of EPA's highest priorities must be to create consistency and certainty for the regulated community. Consistency in how the laws and regulations are applied across the country is part of that process. EPA will undertake a variety of efforts to ensure that consistency in application of laws and regulations is evaluated and addressed, 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 that are required for EPA's actions. The rule of law must also 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 based on sound science.

Carrying out this goal requires that EPA improve the efficiency of its internal business and administrative operations. First, streamlining EPA's business operations, specifically the permitting processes established by the different environmental statutes, is key to ensuring economic growth, human health, and environmental protection. EPA will begin 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. The second part of improving internal operations includes reducing EPA's overhead and creating more efficient and effective administrative processes (e.g. contracting) that allow EPA 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 Agency's FY 2018-2022 Strategic Plan. Two of the six APGs support Goal 3.

- APG-5: 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%.
- APG-6: Accelerate permitting-related decisions. By September 30, 2019, EPA will reduce by 50% the number of permitting-related decisions that exceed six months.

FY 2019 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.

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 cleanup enforcement program. An effective enforcement program is key to ensuring that the ambitious goals of the nation's environmental statutes are realized.

In FY 2019, EPA’s enforcement priorities remain focused on cleaning up hazardous waste sites and addressing the most significant violations consistent with EPA’s statutory authorities. EPA takes the overwhelming majority of its enforcement actions in programs that are: (1) not delegable to a state or tribe; (2) in states or tribes that have not sought authorization to implement a delegable program; or (3) in states or tribes that do not have the resources or expertise, or that seek assistance from the Agency—and these actions are taken in coordination with the states and tribes. For states and tribes with authorized programs, EPA, states, and tribes share enforcement responsibility, with primary enforcement responsibility residing with the state²³ or tribe. Further, EPA is responsible for addressing violations that occur in Indian country in the absence of an approved program.

Even in states or tribes authorized to implement a program, EPA serves a critical role in addressing serious national noncompliance problems, such as those affecting multiple states or tribes, and in serving 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 or resources, such as in actions against other federal or state agencies. For some serious 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, 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 also take a lead implementation role when authorized states have a documented history of failure to make progress toward meeting national standards.

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.

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, states, tribes, territories, and local agencies to ensure consistent and fair enforcement of all major environmental statutes. To that end, the budget includes up to \$20 million to be transferred to the Department of Justice for environmental compliance legal support. 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. EPA requests \$143.5 million and 857.1 FTE for the Civil Enforcement program in FY 2019.

²³ See e.g., ECOS Resolution 98-9, U.S. EPA Enforcement in Delegated States (revised September 28, 2016), describing the EPA and state roles in enforcement in authorized states: “WHEREAS, U.S. EPA and the States have bilaterally developed policy agreements which reflect those roles and which recognize the primary responsibility for enforcement action resides with the States, with U.S. EPA taking enforcement action principally where the State requests assistance, is unwilling or unable to take timely and appropriate enforcement actions, or in actions of national interest, or in actions involving multiple state jurisdictions.”

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 compliance, the Agency will refocus efforts toward areas with 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, where authorized by EPA to implement the federal statutes, and will focus compliance assurance and enforcement resources on direct implementation responsibilities, addressing the most significant violations, and assisting authorized states and tribes in meeting national standards. 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 CAA mobile source program, 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.

Criminal Enforcement

In FY 2019, EPA requests \$48.2 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 that 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. The Agency plays a critical role across the country since states and tribes have limited capacity to prosecute environmental crimes. The Agency will focus resources on the most egregious environmental cases (i.e., those presenting significant human health and environmental impacts).

Cleanup 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 the 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 FY 2017, EPA reached a settlement or took an enforcement action at 100 percent of non-federally owned Superfund sites with viable, liable parties before the start of an FY 2017 remedial action. In FY 2017, the Superfund

Enforcement program also secured private party commitments exceeding \$1.46 billion, a 27 percent increase from FY 2016.

In FY 2019, 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. In FY 2019, EPA requests \$150.5 million and 745.3 FTE to fund the Superfund Enforcement program and \$6.0 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.

The 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, economic 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 \$60.4 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 that expectations for the regulated community and the public are clear and comprehensive and that Agency actions are defensible and consistent with its authorities. The Agency will use new approaches and flexible tools to minimize regulatory uncertainty and will communicate more comprehensively to realize more consistent and better environmental outcomes, while centering work on statutory and regulatory obligations. 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 2019, EPA will complete a base catalog and subsequently update as necessary. This will provide EPA a foundation to make decisions that reduce contradictory policy determinations at headquarters and across regions. It also will support EPA cooperative federalism commitments aimed at minimizing duplication and overlap among regions, headquarters, states, and tribes. This effort also leverages another commitment that 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 across all regions. 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 or 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.

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), 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 Council²⁴, 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 Counselors) that are made up of recognized experts in various scientific, engineering, and social science fields and may be from industry; business; public and private research institutes or organizations; academia; federal, state, tribal, and local governments; nongovernmental organizations; and other relevant interest areas. The Agency recently issued a directive to ensure that the composition of EPA’s science committees is based on integrity, diverse geographic makeup, and independence.

²⁴ For more information on the Interstate Technology and Regulatory Council, go to <http://www.itrcweb.org/>.

Air Quality

EPA's research will advance the science and provide the 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 and consistent with resource and program needs. Recently, EPA's research led to the development of a Wildfire Smoke Guide²⁵ for public health officials, as well as an innovative Smoke Sense mobile application²⁶ for those impacted by wildfires. EPA requests \$30.7 million in FY 2019 to conduct air quality research.

Safe and Sustainable Water Resources

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 to EPA regions and states to provide data that can be used to make informed decisions about managing PFAS. In FY 2019, EPA requests \$67.3 million for research into Safe and Sustainable Water Resources.

Sustainable and Healthy Communities

EPA requests \$64.3 million in FY 2019 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.

Chemical Safety

EPA's Chemical Safety Research 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. EPA requests \$61.7 million for FY 2019, to produce 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. For example, the new version of the Chemistry Dashboard²⁷, released in August 2017, includes new lists of toxins, increased amounts of toxicity value data, enhanced performance of searches, and millions of new predicted data points from the

²⁵ https://www3.epa.gov/airnow/wildfire_may2016.pdf

²⁶ <https://www3.epa.gov/air-research/smoke-sense>

²⁷ Interactive Chemistry Dashboard accessible here: <https://comptox.epa.gov/dashboard/>

Toxicity Estimation Software Tool (TEST). The Chemistry Dashboard provides a one-stop-shop for chemical properties, structure, exposure, and toxicity information that inform chemical exposure and risk evaluations and assessments by the Agency and outside researchers.

Human Health Risk Assessment

EPA also 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. EPA's risk assessments will be used to inform national standards, clean-up levels at local sites, and set advisory levels. EPA requests \$27.3 million in FY 2019 to support the Human Health Risk Assessment Research Program.

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

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 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 can also 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. Further, EPA will continue to work toward converting permit applications and reports that rely on paper submissions to electronic processing in order to reduce burden, shorten the wait for decisions, and increase the opportunity for public transparency. To implement this objective, EPA requests a total of \$29.0 million in FY 2019.

EPA will systematically collect and report permitting data for each of its permitting programs. The Agency also will employ business process improvement strategies, such as Lean, to improve efficiencies in all permitting processes and meet our commitments. The Agency also will work with states and use Lean techniques to streamline the review of state-issued permits. Solutions may include conducting earlier triage and communications, conducting Agency reviews in parallel with public reviews, and/or focusing reviews where they add the most value.

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 plant-wide 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 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.

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

To support its 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). These enhancements will improve EPA's future workforce, modernize and streamline its business practices, and 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 work to alleviate challenges associated with outdated or non-existent policies, tension between centralized and decentralized approaches, myriad federal acquisition and grants requirements, complex processes, and varying levels of expertise across Agency programs. To support this objective, EPA requests a total of \$907.1 million and 2,222.5 FTE in FY 2019.

EPA will modernize and improve business processes and operations to promote transparency, efficiency, and effectiveness; enhance collaborative, results-driven partnerships with internal and external business partners; recruit, develop, and maintain a highly-skilled, diverse, and engaged workforce; and improve the capabilities and cost-effectiveness of its IT and IM systems.

EPA will apply Lean principles and will leverage input from customer-focused councils, advisory groups, surveys, workgroups, acquisition partnership initiatives, technical user groups, 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 and grants processes and systems, and use additional federal and/or internal shared services. When EPA has applied Lean to processes across the Agency, process times were reduced by 50 percent on average.

EPA will ensure its workforce is positioned to accomplish the Agency's mission effectively by providing access to quality training and development opportunities that will improve staff's and managers' skills, knowledge, and performance, and prepare them to capitalize on opportunities that advance progress. EPA will improve its workforce planning and management, strengthen its Senior Executive Service, and focus on developing and maintaining a highly-skilled technical workforce.

EPA also will work to transform and modernize its information systems, tools, and processes to improve how the Agency collaborates both 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 effectively to acquire, generate, manage, use, and share information – a critical resource in protecting human health and the environment – EPA will improve its IT/IM capabilities and customer experiences. EPA will employ enterprise risk management and financial data analytics to support data management decision making, using the enterprise risk management framework mandated by OMB Circular A-123.

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.

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 both 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 analytics. 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 must 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.