United States
Environmental Protection Agency

Fiscal Year 2020

Justification of Appropriation Estimates for the Committee on Appropriations

Tab 02: Goal and Objective Overviews

EPA-190-R-19-002

March 2019
www.epa.gov/ocfo

Environmental Protection Agency
2020 Annual Performance Plan and Congressional Justification

Table of Contents – Goal and Objective Overviews

GOAL, APPROPRIATION SUMMARY

Budget Authority
(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget
Core Mission	$6,583,190.8	$6,751,484.0	$4,402,343.0
Science & Technology	$163,712.6	$168,890.0	$133,795.0
Environmental Programs & Management	$1,462,463.6	$1,487,858.0	$774,163.0
Inland Oil Spill Programs	$14,690.3	$14,409.0	$12,413.0
Hazardous Substance Superfund	$870,441.1	$818,373.0	$701,270.0
Leaking Underground Storage Tanks	$92,053.1	$89,649.0	$45,562.0
State and Tribal Assistance Grants	$3,965,448.1	$4,109,305.0	$2,710,140.0
Hazardous Waste Electronic Manifest System Fund	$2,146.2	$0.0	$0.0
Water Infrastructure Finance and Innovation Fund	$12,235.8	$63,000.0	$25,000.0
Cooperative Federalism	$317,734.7	$322,751.0	$228,323.0
Environmental Programs & Management	$223,212.4	$226,901.0	$169,292.0
Inland Oil Spill Programs	$122.5	$139.0	$0.0
Hazardous Substance Superfund	$2,304.3	$2,501.0	$991.0
State and Tribal Assistance Grants	$92,095.5	$93,210.0	$58,040.0
Rule of Law and Process	$1,850,873.9	$1,899,101.0	$1,664,824.0
Science & Technology	$521,410.4	$544,933.0	$329,265.0
Environmental Programs & Management	$898,370.9	$928,540.0	$901,813.0
Inspector General	$40,328.4	$41,489.0	$38,893.0
Building and Facilities	$40,526.8	$34,467.0	$39,553.0
Inland Oil Spill Programs	$3,914.2	$3,661.0	$3,549.0
Hazardous Substance Superfund	$334,388.4	$334,073.0	$343,090.0
Leaking Underground Storage Tanks	$2,384.5	$2,292.0	$2,239.0
State and Tribal Assistance Grants	$9,550.3	$9,646.0	$6,422.0
Sub-Total	*$8,751,799.4*	*$8,973,336.0*	*$6,295,490.0*
Cancellation of Funds	$0.0	-$148,848.0	-$227,000.0
TOTAL, EPA	$8,751,799.4	$8,824,488.0	$6,068,490.0

GOAL, APPROPRIATION SUMMARY

Authorized Full-time Equivalents (FTE)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget
Core Mission	6,844.9	6,813.7	5,936.0
Science & Technology	494.8	510.1	462.0
Environmental Programs & Management	4,683.6	4,754.2	3,743.4
Inland Oil Spill Programs	71.2	72.6	62.3
Hazardous Substance Superfund	1,376.3	1,319.9	1,339.2
Leaking Underground Storage Tanks	40.7	41.8	33.6
State and Tribal Assistance Grants	5.5	6.6	0.4
Hazardous Waste Electronic Manifest System Fund	7.4	7.9	10.0
Water Infrastructure Finance and Innovation Fund	11.7	12.8	12.0
Rereg. & Exped. Proc. Rev Fund	90.6	87.8	221.5
Cooperative Federalism	1,123.2	1,145.6	850.0
Environmental Programs & Management	1,114.4	1,135.3	846.8
Inland Oil Spill Programs	0.5	0.6	0.0
Hazardous Substance Superfund	6.7	7.8	1.2
WCF-Reimbursable	1.6	1.9	2.0
Rule of Law and Process	6,249.1	6,416.8	5,628.6
Science & Technology	1,515.0	1,529.1	1,035.5
Environmental Programs & Management	3,149.5	3,222.4	2,897.5
Inspector General	209.4	215.8	201.4
Inland Oil Spill Programs	12.7	13.6	13.4
Hazardous Substance Superfund	1,205.1	1,252.6	1,250.2
Leaking Underground Storage Tanks	6.2	6.8	7.1
Hazardous Waste Electronic Manifest System Fund	0.0	0.0	1.0
WCF-Reimbursable	151.2	176.5	210.5
TOTAL, EPA	14,217.2	14,376.1	12,414.6

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 Toxic Substances Control Act, and the Federal Insecticide, Fungicide, and Rodenticide Act, to ensure new and existing chemicals and pesticides are reviewed for their potential risks to human health and the environment and actions are taken when necessary.

GOAL, OBJECTIVE SUMMARY

Budget Authority
Full-time Equivalents
(Dollars in Thousands)

	FY 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Core Mission	**$6,583,190.8**	**$6,751,484.0**	**$4,402,343.0**	**-$2,349,141.0**
Improve Air Quality	$768,382.4	$789,367.0	$425,321.0	-$364,046.0
Provide for Clean and Safe Water	$4,195,873.8	$4,388,076.0	$2,695,245.0	-$1,692,831.0
Revitalize Land and Prevent Contamination	$1,382,609.6	$1,333,325.0	$1,055,594.0	-$277,731.0
Ensure Safety of Chemicals in the Marketplace	$236,325.0	$240,716.0	$226,183.0	-$14,533.0
Total Authorized Workyears	6,844.9	6,813.7	5,936.0	-877.7

Goal 1: Core Mission

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

Introduction

Pollution comes in many forms with a myriad of impacts on human health and the environment. With the goal of clean and safe air, water, and land as well as safe chemicals for all of America, Congress enacted a range of environmental statutes that spell out EPA's responsibilities. Our Nation has come a long way since EPA was established in 1970. We have made great progress in making rivers and lakes safe for swimming and boating, reducing the smog that clouded city skies, cleaning up lands that were once used as chemical dumps, and providing Americans greater access to information on the safety of the chemicals all around us. Today we can see enormous progress—yet we still have important work to do.

In FY 2020, the Agency will work with states and tribes to approve their implementation plans for attaining air quality standards, reducing air pollutants and toxics that can cause or exacerbate health issues. We will work with our state and tribal partners to provide for clean and safe water by updating aging infrastructure, both for drinking water and wastewater systems. EPA will continue to focus on speeding the cleanup of Superfund and brownfields sites, prioritizing efforts on a list of top priority sites to advance progress on Superfund sites of concern. The Agency's top priority for ensuring the safety of chemicals in the marketplace is the implementation of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, which modernizes the Toxic Substances Control Act (TSCA) by creating new standards and processes for assessing chemical safety within specific deadlines. These efforts will be supported by strong compliance assurance and enforcement in collaboration with our state and tribal partners, up-to-date training for partners and co-regulators, and the use of the best available science and research to address current and future environmental hazards to improve the foundation for decision making.

The Agency will continue its collaborative efforts with federal agencies, states, tribes, local governments, communities, and other partners and stakeholders to address existing pollution and prevent or reduce future problems. EPA will directly implement federal environmental laws where eligible tribes or states have not taken program responsibility.

With our partners, we will pay particular attention to vulnerable populations. Children and the elderly, for example, may be at significantly greater risk from elevated exposure or increased susceptibility to the harmful effects of environmental contaminants and pollutants. Some low-income and minority communities may face greater risks because of proximity to contaminated sites or sources of emissions. Traditional ways of life for tribal and indigenous populations such as subsistence hunting, fishing, and gathering also may increase the risk of exposure to contaminants. The needs of small and rural communities may not be the same as urban areas. Together with our partners, we will continue making progress in protecting human health and the environment. The Healthy Schools Grant Program proposed in the Budget is intended to address potential gaps in school environmental health information by supporting states, federally recognized Indian tribes, public pre-schools, local educational agencies as defined in 20 U.S.C.

7801(30), and non-profit organizations, in the identification and mitigation of potential environmental health issues.

The Agency also will continue to place an emphasis on reducing unnecessary or duplicative burden to the regulated community. This will be advanced through implementation of the President's Management Agenda and through common sense deregulatory actions that provide greater certainty and better communication to our partners. The FY 2020 Budget includes support for ongoing information technology (IT) modernization work and the E-Enterprise for the Environment initiative. These efforts can enhance efficiency and improve the service delivery of our core environmental programs, reduce the time and burden associated with reporting, and make more environmental data available through shared systems.

Agency Priority Goals

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

- **Improve air quality by implementing pollution control measures to reduce the number of nonattainment areas.** By September 30, 2019, EPA, in close collaboration with states, will reduce the number of nonattainment areas to 138 from a baseline of 166.

- **Empower communities to leverage EPA water infrastructure investments.** By September 30, 2019, EPA will increase by $16 billion the non-federal dollars leveraged by EPA water infrastructure finance programs (Clean Water and Drinking Water State Revolving Funds and the Water Infrastructure Finance and Innovation Act).

- **Accelerate the pace of cleanups and return sites to beneficial use in their communities.** By September 30, 2019, EPA will make an additional 102 Superfund sites and 1,368 Brownfields sites ready for anticipated use (RAU).

- **Meet new statutory requirements to improve the safety of chemicals in commerce.** By September 30, 2019, EPA will complete in accordance with statutory timelines (excluding statutorily-allowable extensions): 100% of required EPA-initiated Toxic Substances Control Act (TSCA) risk evaluations for existing chemicals; 100% of required TSCA risk management actions for existing chemicals; and 80% of TSCA pre-manufacture notice final determinations.

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

FY 2020 Activities

***Objective 1: Improve Air Quality*. Work with states and tribes to accurately measure air quality and ensure that more Americans are living and working in areas that meet high air quality standards.**

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

- By September 30, 2022, reduce the number of nonattainment areas to 101.[2]

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

EPA is dedicated to working in partnership with states to reduce the number of nonattainment areas for the six common pollutants in the United States – particulate matter up to 2.5 and 10 microns ($PM_{2.5}$ and PM_{10}), sulfur dioxide (SO_2), nitrogen oxides (NO_x), ozone, carbon monoxide (CO) and lead (Pb). Between 1970 and 2017, the combined emissions of these six criteria pollutants dropped by 73 percent.[3] This progress occurred while the U.S. economy, as measured by Gross Domestic Product, grew by over 260 percent,[4] Americans drove more, and population and energy use increased. Despite this great progress in air quality improvement, in 2017, approximately 111 million people nationwide lived in counties with pollution levels that did not meet standards for at least one criteria pollutant, or about 40 percent of the U.S. population based on 2010 census data. EPA works in cooperation with states, tribes, and local governments to design and implement air quality standards and programs. EPA relies on partnerships with other federal agencies, academia, researchers, industry, other organizations, and the public to achieve improvements in air quality and reduce public health risks.

For FY 2020, EPA requests $425.3 million and 1,270.8 FTE to improve air quality. Highlights include:

National Ambient Air Quality Standards (NAAQS) Implementation

EPA's criteria air pollutant program is critical to continued progress in reducing public health risks and improving air quality. Listening to and working with state and tribal partners to set and implement standards is key to achieving progress. The criteria pollutant program sets NAAQS, which are then implemented by state, local, and tribal air agencies which have primary responsibility under the Clean Air Act (CAA) for developing clean air plans. For FY 2020, EPA requests $111.1 million for the Federal Support for Air Quality Management program to advance this important work.

In FY 2020, EPA will continue to prioritize key activities in support of attainment of the NAAQS. The Agency will address its CAA responsibilities by collaborating with and providing technical

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

[3] The Clean Air Act (CAA) requires EPA to set National Ambient Air Quality Standards (NAAQS) for six common air pollutants including carbon monoxide, lead, ground-level ozone, nitrogen dioxide, particulate matter, and sulfur dioxide.

[4] https://gispub.epa.gov/air/trendsreport/2018/#growth_w_cleaner_air

assistance to states and tribes to develop implementation plans for attaining the NAAQS and visibility improvement requirements; reviewing state and tribal implementation plans; taking federal oversight actions such as approving state implementation plan (SIP) and tribal implementation plan (TIP) submittals consistent with statutory obligations; developing regulations and guidance to implement standards; and addressing transported air pollution. EPA will continue to focus on ways to improve the efficiency and effectiveness of the SIP/TIP process, including the Agency's internal standards for reviewing SIPs and TIPs, with a goal of maximizing timely processing of state/tribal-requested implementation plan actions to help move more rapidly to attainment of air quality standards.

Air Toxics

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

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

Grants for State, Local and Tribal Air Quality Management

For FY 2020, EPA requests $160.9 million to provide federal support for grants to state and local air quality management agencies and to tribes where applicable, to manage and implement air quality control programs. States, working with EPA, are responsible for SIPs, which provide a blueprint for the programs and activities that states carry out to attain and maintain the NAAQS and comply with visibility obligations. States also will operate and maintain their existing monitoring networks at baseline levels to provide high quality data used to develop and maintain clean air plans, to support research, and for the public. Some grant funding also will be used to provide training to states and tribes.

Federal Vehicle and Fuels Standards and Certification Program

EPA develops, implements, and ensures compliance with national emission standards to reduce mobile source-related air pollution from light-duty cars and trucks, heavy-duty trucks and buses, nonroad engines and vehicles, and their fuels. The program also evaluates new emission control technology and provides information to state, tribal, and local air quality managers on a variety of transportation programs.

In FY 2020, EPA requests $77.8 million for the Federal Vehicle and Fuels Standards and Certification program, which will prioritize certification decisions to ensure that manufacturers are able to enter their engines and vehicles into commerce once their products have been certified. EPA will continue to ensure clean and safe air levels while providing certainty and flexibility to

the regulated community. The Agency will continue to perform its compliance oversight functions on priority matters, where there is evidence to suggest noncompliance. EPA will continue to conduct testing activities for pre-certification confirmatory testing for emissions and fuel economy for passenger cars. On November 13, 2018, EPA announced the Cleaner Trucks Initiative, a new rulemaking effort to address NOx emissions from heavy-duty trucks. In FY 2020, as a part of this rulemaking effort, EPA will evaluate the technologies which can ensure real-world compliance with emissions standards and will also seek opportunities to modernize and streamline the regulatory framework for the heavy-duty highway sector.

Atmospheric Protection Program
EPA implements the Atmospheric Protection program, which requires mandatory greenhouse gas emissions reporting from large industrial source categories in the U.S., covering a total of 41 sectors and approximately 8,000 reporting entities. The data is shared with industry stakeholders, state and local governments, the research community, and the public to better understand emissions, inform decisions, and communicate progress of actions. The data also informs the annual Greenhouse Gas Inventory, a U.S. treaty obligation. In addition, EPA will work to complete the annual Inventory of U.S. Greenhouse Emissions and Sinks. In FY 2020, EPA requests $14 million to continue to implement the Atmospheric Protection program.

Energy Star Program Fee Proposal Implementation
In FY 2020, EPA proposes to implement user fees for entities that participate in the Energy Star program. By administering the Energy Star program through the collection of user fees, EPA would continue to provide a trusted resource for consumers and businesses who want to purchase products that save money and help protect the environment. Entities participating in the program would pay a fee that would offset the costs for managing and administering the program. The fee collections would provide funding to replace, to the extent allowable, an upfront appropriation of $46 million that covers FY 2020 expenses to develop, operate, and maintain the Energy Star program.

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

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

In FY 2020, EPA's Radiological Emergency Response Team (RERT) will maintain essential readiness to support federal radiological emergency response and recovery operations under the NRF and NCP. EPA will design and conduct essential training and exercises to enhance the

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

RERT's ability to fulfill EPA's responsibilities and improve overall radiation response preparedness. The Agency also will continue to operate the Agency's nationwide fixed ambient environmental radiation monitoring network, RadNet.

***Objective 2: Provide for Clean and Safe Water*. Ensure waters are clean through improved water infrastructure and, in partnership with states and tribes, sustainably manage programs to support drinking water, aquatic ecosystems, and recreational, economic, and subsistence activities.**

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

- By September 30, 2022, reduce the number of community water systems out of compliance with health-based standards to 2,700.[6]
- By September 30, 2022, increase by $40 billion the non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, DWSRF and WIFIA).[7]
- By September 30, 2022, reduce the number of square miles of watershed with surface water not meeting standards by 37,000 square miles.[8]

Providing support to ensure safe drinking water in communities, increasing investment in water infrastructure projects, and protecting surface water are high priorities for EPA. The Nation's water resources are the lifeblood of our communities, supporting our economy and way of life. Across the country, we depend upon reliable sources of clean and safe water. Just a few decades ago, many of the Nation's rivers, lakes, and estuaries were grossly polluted, wastewater sources received little or no treatment, and drinking water systems provided very limited treatment to water coming through the tap. Now, nearly 93 percent of the population served by community water systems receives water that meets all applicable health-based drinking water standards, and formerly impaired waters have been restored and now support recreational and public health uses that contribute to healthy economies. A top priority for EPA is modernizing the outdated water infrastructure on which the American public depends. The America's Water Infrastructure Act of 2018 (AWIA) was enacted to help address numerous drinking water and wastewater issues at large projects and small rural communities.

In FY 2020, EPA will focus resources on supporting the modernization of outdated drinking water, wastewater, and stormwater infrastructure; creating incentives for new water technologies and innovation; and funding the core requirements of the Clean Water Act (CWA) and the Safe Drinking Water Act (SDWA). The Agency will look to provide states and tribes with flexibility to best address their priorities.

EPA will continue to provide loans and grants to states and tribes to improve infrastructure. Given that investment in infrastructure is necessary for economic growth and environmental protection

[6] Baseline is 3,508 community water systems out of compliance with health-based standards as of FY 2017. (Footnote updated from *FY 2018-2022 EPA Strategic Plan.*)
[7] Baseline is $32 billion in non-federal dollars leveraged from the CWSRF and DWSRF between FY 2013 and FY 2017 (i.e., loans made from recycled loan repayments, bond proceeds, state match, and interest earnings). The baseline does not include WIFIA leveraged dollars because no loans were closed prior to FY 2018. (Footnote updated from *FY 2018-2022 Strategic Plan.*)
[8] Draft baseline is 464,020 square miles of impaired waters as of September 2017, to be updated in FY 2019. (Footnote updated from *FY 2018-2022 Strategic Plan.*)

and that EPA investments are catalyst for both, EPA's efforts will be used to support private and public investment in economic revitalization and improved environmental outcomes across the country. This requires that EPA strengthen infrastructure in communities through its programs (e.g., the drinking water SRF, clean water SRF, and WIFIA) to better align EPA investments with each other and with other investments in pursuit of economic revitalization and improved environmental outcomes. At the same time, EPA will ensure it is serving disadvantaged communities, leveraging private investment to improve the economy, and protecting human health and the environment.

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

Water Infrastructure Investments
We have made significant progress in advancing water quality since enactment of the Clean Water Act (CWA), Safe Drinking Water Act (SDWA), and Marine Protection, Research, and Sanctuaries Act over 40 years ago. However, serious water quality and water infrastructure challenges remain. Many communities need to improve and maintain drinking water and wastewater infrastructure as well as to develop the capacity to comply with new and existing standards. Tens of thousands of homes, primarily in tribal and disadvantaged communities and the territories, lack access to basic sanitation and drinking water. EPA will continue to support progress in these communities in FY 2020.

EPA's water infrastructure programs also benefit from a close relationship with states, municipal, and tribal governments, as well as industry and other public groups. In addition to EPA's long-standing partnerships through the SRFs, the Water Infrastructure Finance and Innovation Act (WIFIA) credit program is working with both public and private eligible borrowers to fund vital infrastructure projects. WIFIA is an innovative and flexible financing mechanism and, as demonstrated by the first two rounds of applications and selected projects, the program encourages a wide variety of finance approaches.[9]

A top priority for EPA is modernizing the outdated water infrastructure on which the American public depends. In FY 2020, EPA requests $1.983 billion for the State Revolving Funds and $25 million for the WIFIA program. The FY 2020 capitalization of the SRFs would supplement approximately $80 billion currently revolving at the state level. WIFIA is expected to leverage significant funding for infrastructure and could provide up to $2 billion in direct credit assistance, which, when combined with other funding sources, could spur over $4 billion in total infrastructure investment.[10]

The America's Water Infrastructure Act of 2018 (AWIA) was recently enacted to help address numerous drinking water and wastewater issues at large projects and small rural communities. EPA is focused on implementing several mandates included in the law, which strengthens the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. AWIA strengthened many existing programs within EPA,

[9] For additional information, refer to: https://www.epa.gov/wifia/wifia-letters-interest.
[10] This approximation is based on notional calculations. Subsidy cost is determined on a loan-by-loan basis.

while creating new programs to tackle significant public health concerns and environmental needs. These programs are vital to protecting public health, continuing to grow the American economy and ensuring that rural and urban communities from coast-to-coast can access clean and safe water. New mandates range from the creation of grant programs to promoting water quality workforce development. AWIA mandates will be critical to advancing Agency priorities by increasing water infrastructure investment and improving drinking water and water quality across the country. In FY 2020, five new program projects are requested to implement AWIA legislation including: Drinking Fountain Lead Testing, Drinking Water Infrastructure Resilience, Sewer Overflow Control Grants, Technical Assistance for Treatment Works, and Water Infrastructure and Workforce Investment.

In addition to AWIA, Congress passed several pieces of legislation at the end of 2018, including the Integrated Planning Bill and the Vessel Incidental Discharge Act (VIDA), which assign new programming and oversight responsibilities to EPA. In FY 2020, EPA will work to implement the mandates included in this new legislation.

Categorical Grants to States and Tribes

Protecting the Nation's water from pollution and contaminants relies on cooperation between EPA, states, and tribes. States and tribes are best positioned to implement localized solutions to protect their waters. EPA will work with states, territories, tribes, and local communities to better safeguard human health; maintain, restore, and improve water quality; and make America's water systems sustainable and secure, supporting new technology and innovation wherever possible.

In FY 2020, EPA requests funding for the following categorical grants that support state and tribal implementation of the CWA and the SDWA: Public Water System Supervision, Pollution Control (CWA Section 106), Underground Injection Control (UIC), and Wetlands Program Development Grants. EPA will work with states and tribes to target the funds to core requirements while providing flexibility to best address their priorities. Funding for the categorical grants to states and tribes to support core water programs is $248.3 million, including $10 million for the Multipurpose Grant program, which is a flexible grant program to support multiple statutory responsibilities, including water programs.

Safe Drinking Water

For FY 2020, EPA requests $93.9 million to support Drinking Water programs. EPA will work to reduce lead risks by working on the next step to the Lead and Copper Rule and developing regulations to implement the Water Infrastructure Improvement for the Nation Act (WIIN) and the Reduction of Lead in Drinking Water Act. EPA also will continue to work with states and tribes to protect underground sources of drinking water from injection of fluids though the UIC program. In addition, EPA will continue work with states to develop the next generation Safe Drinking Water Information System (SDWIS) tool used by the majority of state drinking water programs. The tool will provide many benefits including: improvements in program efficiency and data quality, greater public access to drinking water data, facilitation of electronic reporting, reductions in reporting burdens on laboratories and water utilities, reductions in data management burden for states, and ultimately reduction in public health risk.

Clean Water
In FY 2020, EPA requests $188.2 million for the Surface Water Protection program and $21.6 million for the Wetlands program. The FY 2020 Budget supports the following core Surface Water Protection program components: water quality criteria, standards and technology-based effluent guidelines; National Pollutant Discharge Elimination System (NPDES); water monitoring; Total Maximum Daily Loads; watershed management; water infrastructure and grants management; core wetlands programs and CWA Section 106 program management. EPA will continue to implement and support the core water quality programs that control point source discharges through permitting and pre-treatment programs. The NPDES program under the Clean Water Act works with states to structure the permit program, support its implementation and to better pursue protection of water quality on a watershed basis.

Homeland Security
In FY 2020, EPA will coordinate and support protection of the Nation's critical water infrastructure from terrorist threats and all-hazard events. Under this homeland security mission, EPA will annually train over 2,500 water utilities, state officials, and federal emergency responders on resiliency to natural or manmade incident that could endanger water and wastewater services. EPA will continue to develop the most efficient mechanisms for detecting and addressing harmful substances in the water distribution system. In addition, EPA will fulfill its obligations under Executive Order (EO) 13636 – *Improving Critical Infrastructure Cybersecurity* – which designates EPA as the lead federal agency responsible for cybersecurity in the water sector. In FY 2020, EPA will conduct nationwide, in-person training sessions in cybersecurity threats and countermeasures for approximately 200 water and wastewater utilities.

Objective 3: Revitalize Land and Prevent Contamination. **Provide better leadership and management to properly clean up contaminated sites to revitalize and return the land back to communities.**

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

- By September 30, 2022, make 255 additional Superfund sites ready for anticipated use (RAU) site-wide.[11]
- By September 30, 2022, make 3,420 additional brownfields sites RAU.[12]
- By September 30, 2022, make 536 additional Resource Conservation and Recovery Act (RCRA) corrective action facilities RAU.[13]
- By September 30, 2022, complete 56,000 additional leaking underground storage tank (LUST) cleanups that meet risk-based standards for human exposure and groundwater migration.[14]

EPA works to improve the health and livelihood of all Americans by cleaning up and returning land to productive use, preventing contamination, and responding to emergencies. In FY 2020, the

[11] By the end of FY 2017, 836 Superfund sites had been made RAU site-wide.
[12] From FY 2006 through the end of FY 2017, 5,993 brownfield properties/sites had been made RAU. (Footnote updated from *FY 2018-2022 Strategic Plan.*)
[13] From FY 1987 through FY 2017, 1,232 of the universe of 3,779 high priority RCRA corrective action facilities had been made RAU site-wide. (Footnote updated from *FY 2018-2022 Strategic Plan.*)
[14] By the end of FY 2017, 469,898 LUST cleanups had been completed.

Agency is accelerating the pace of cleanups and reuse while addressing risks to human health and the environment. EPA uses its resources to enhance the livability and economic vitality of neighborhoods in and around hazardous waste sites, by collaborating with, and leveraging efforts of other federal agencies, industry, states, tribes, and local communities. EPA also partners with states, tribes, local communities, and industry to prevent and reduce exposure to harmful contaminants. Superfund and the Resource Conservation and Recovery Act (RCRA) provide legal authority for EPA's work to protect and restore land. The Agency and its partners use Superfund authority to clean up uncontrolled or abandoned hazardous waste sites, allowing land to be returned to productive use. Under RCRA, EPA works in partnership with states and tribes to address risks associated with the generation, transportation, treatment, storage or disposal of waste, and to clean up contamination at active sites.

EPA collaborates with international, state, tribal, and local governments while considering the effects of decisions on communities. EPA engages communities to help them understand and address risks posed by intentional and accidental releases of hazardous substances into the environment and to ensure that communities have an opportunity to participate in environmental decisions that affect them. Risk communication goes to the heart of EPA's mission and the Agency must speak with one voice when explaining to the American people the environmental and health risks they face in their daily lives. EPA's efforts are guided by scientific data, tools, and research that alert the American people to emerging issues and inform decisions on managing materials and addressing contaminated properties.

In FY 2020, EPA requests $1.056 billion and 2,059.5 FTE to support this objective. To maximize effectiveness, EPA will focus on implementing core programs where a federal presence is required by the statute. This strategic objective is supported by core land program work. Highlights include:

Cleaning Up Contaminated Sites
EPA's cleanup programs (i.e., Superfund Remedial, Superfund Federal Facilities, Superfund Emergency Response and Removal, RCRA Corrective Action, Underground Storage Tanks and Brownfields) work cooperatively with state, tribal, and local partners to take proactive steps to facilitate the cleanup and revitalization of contaminated properties. Cleanup programs protect both human health and the environment and return sites to productive use, which is important to the economic wellbeing of communities. Working with partners across the country, EPA engages with communities in site cleanup decisions, fosters employment opportunities in communities, and promotes the redevelopment of blighted areas. For FY 2020, EPA requests $856 million to fund EPA's cleanup programs.

Superfund Remedial
One of EPA's top priorities is accelerating progress on the cleanup and reuse of Superfund sites. The reuse of a site often can play a role in economically revitalizing a community. Superfund properties are often reused as commercial facilities, retail centers, government offices, residential areas, industrial and manufacturing operations, parks, and recreational areas. At the end of FY 2018, 887 Superfund sites had been determined to be Sitewide Ready for Anticipated Use (RAU) out of a total of 1,836 Superfund sites. During FY 2018, 51 Superfund sites were made RAU. EPA data shows that as of FY 2017 at the 487 Superfund sites in reuse, approximately 6,622 businesses

are generating $43.6 billion in sales. These businesses employ 156,352 people who earn a combined income of $11.2 billion.[15]

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

Building on recommendations from the Superfund Task Force Report, the Agency will continue to help communities clean up and revitalize once productive properties. This will be achieved by: removing contamination; enabling economic development; taking advantage of existing infrastructure; and maintaining and improving quality of life. There are multiple benefits associated with cleaning up contaminated sites including: reducing mortality and morbidity risk; preventing and reducing human exposure to contaminants; improving nearby property values; making land available for commercial, residential, industrial, or recreational reuse; and promoting community economic development. For example, research shows that residential property values within three miles of Superfund sites increased between 18.7 to 24.4 percent when sites were cleaned up and deleted from the NPL.[17]

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

Superfund Federal Facilities

The federal facility sites are among the largest in the Superfund program, accounting for a high percentage of the annual program cleanup commitments and encompassing some of the most dangerous and unique environmental contaminants, including munitions, radiological waste, and emerging contaminants such as per-and polyfluoroalkyl substances (PFAS). EPA works closely with other federal agencies, states, tribes, and stakeholders to ensure protective and cost-effective cleanups at these NPL sites. The Agency requests $20.5 million for this program in FY 2020.

Superfund Removal

From FY 2009 to FY 2018, EPA completed or oversaw over 3,427 Superfund removal actions across the country. This work is performed as part of the overarching effort to clean up contaminants and protect human health and the environment.

[15] For more information on Redevelopment Economics and in-depth case studies see www.epa.gov/superfund-redevelopment-initiative/redevelopment-economics-superfund-sites.
[16] Please see the Superfund Task Force Recommendations 2018 Update at https://semspub.epa.gov/work/HQ/197209.pdf.
[17] Gamper-Rabindran, Shanti and Christopher Timmons. 2013. "Does cleanup of hazardous waste sites raise housing values? Evidence of spatially localized benefits," Journal of Environmental Economics and Management 65(3): 345-360.

In the case of a national emergency, EPA's Superfund Emergency Response and Removal program is charged with preventing, limiting, mitigating, or containing chemical, oil, radiological, biological, or hazardous materials released during and in the aftermath of an incident. Typical situations requiring emergency response and removal actions vary greatly in size, nature, and location, and include chemical releases, fires or explosions, natural disasters, and other threats to people from exposure to hazardous substances. EPA's 24-hour-a-day response capability is a cornerstone element of the National Contingency Plan.[18] In FY 2020, EPA requests $168.4 million for the Superfund Emergency Response and Removal program.

RCRA Corrective Action

EPA works in partnership with states to carry out its mission and has authorized 44 states and one territory to directly implement the RCRA Corrective Action program[19]. This program is responsible for overseeing and managing cleanups at active RCRA sites. States have requested EPA participate in work sharing under this program, and the Agency serves in a lead or support role for a significant number of complex and challenging cleanups in both non-authorized and authorized states. To advance this work, the Budget includes $33.2 million to support the RCRA: Corrective Action program.

Underground Storage Tanks

The Underground Storage Tank (UST) program has achieved significant success in addressing releases since the beginning of the program. FY 2018 data show that, of the approximately 543,800 releases reported since the beginning of the UST program in 1988, more than 478,000 (or 88 percent) have been cleaned up. Approximately 65,450 releases remain that have not reached cleanup completion. EPA is working with states to develop and implement specific strategies and activities applicable to their particular sites to reduce the UST releases remaining to be cleaned up. The important work of this program is demonstrated by a 2017 study found that high profile UST releases decrease nearby property values by 2 to 6 percent. However, once cleanup is completed, property values rebound by a similar margin.[20] EPA requests a total of $51.6 million in FY 2020 for Underground Storage Tank direct cleanup and state cooperative agreements.

Brownfields

Approximately 129 million people (roughly 40 percent of the U.S. population) live within three miles of a Brownfields site that receives EPA funding.[21] By awarding Brownfields grants, EPA is making investments in communities so that they can realize their visions for environmental health, economic growth, and job creation. As of November 2018, grants awarded by the program have led to over 77,000 acres of idle land made ready for productive use and over 141,300 jobs and $26.8 billion leveraged.[22] During FY 2018, 861 Brownfields sites were made RAU. In FY 2020,

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

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

[20] Guignet, D. R. Jenkins, M. Ranson, and P. Walsh. 2018. "Contamination and Incomplete Information: Bounding Implicit Prices using High-Profile Leaks," Journal of Environmental Economics and Management, 88(C): 259-282. https://doi.org/10.1016/j.jeem.2017.12.003.

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

[22] EPA's ACRES database.

the Agency will continue to make additional Brownfields sites RAU. A 2017 study found that housing property values increased 5 to 15.2 percent near Brownfield sites when cleanup was completed.[23] Another 2017 study of 48 Brownfield sites showed an estimated $29 to $97 million in additional tax revenue generated for local governments in a single year after cleanup; this is 2 to 7 times more than the $12.4 million EPA contributed to the cleanup of those Brownfields.[24] The FY 2020 Budget includes $110.5 million to advance Brownfields work and continue these positive returns to the environment, public health, and the economy.

Preserving Land

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

Chemical Facility Safety

EPA plays a valuable role in working with states and communities to build the capacity to prevent, prepare for, and respond to emergencies at chemical facilities. The program establishes a structure for federal, state, local, and tribal partners to work together with industry to protect emergency responders, local communities, and property from chemical risks through advanced technologies, community engagement, and improved safety systems. In FY 2020, the program will prioritize inspection of facilities required to have a Risk Management Plan (RMP) to ensure compliance with accident prevention and preparedness activities. In FY 2020, EPA requests $10.5 million for the State and Local Prevention and Preparedness program.

State and Local Prevention and Preparedness Fee Proposal

EPA proposes new fee authority in the State and Local Prevention and Preparedness program to better support compliance assistance work for RMP facilities. Once authorized, the new voluntary fee and service would provide support for facilities in complying with EPA regulations. Authorizing language for the new fee collection accompanies the FY 2020 Budget submission.

RCRA Waste Management

States have primary responsibility for almost all the efforts related to permitting hazardous waste units (such as incinerators and landfills) at treatment, storage, and disposal facilities. In FY 2020, permits for these activities will be issued, updated, or maintained as necessary. EPA directly implements the entire RCRA program in two states and provides leadership, work-sharing, and support to the states and territories authorized to implement the permitting program. In addition, EPA reviews and approves Polychlorinated Biphenyls (PCB) cleanup, storage, and disposal activities as this federal authority is not delegable to state programs. The FY 2020 Budget includes an increase of $3 million, including 14 FTE, to execute a delegation to states and to develop and implement a permit program for coal combustion residuals. The FY 2020 Budget provides $46.8 million to the RCRA Waste Management program.

[23] Haninger, K., L. Ma, and C. Timmins. 2017. The Value of Brownfield Remediation. *Journal of the Association of Environmental and Resource Economists, 4(1): 197-241*, https://ideas.repec.org/a/ucp/jaerec/doi10.1086-689743.htm.
[24] Sullivan, Karen A. Journal of Environmental Assessment Policy and Management
Vol. 19, No. 3 (September 2017) 1750013, https://www.worldscientific.com/doi/pdf/10.1142/S1464333217500132.

Hazardous Waste Electronic Manifest
On October 5, 2012, the Hazardous Waste Electronic Manifest Establishment Act was enacted, requiring EPA to develop and maintain a hazardous waste electronic manifest system. The system is designed to, among other functions, assemble and maintain the information contained in the estimated two million manifest forms accompanying hazardous waste shipments across the Nation annually. On June 30, 2018, EPA launched the e-Manifest system, giving generators, transporters, and receiving facilities the option of using electronic manifests. The e-Manifest system improves knowledge of waste generation and final disposition, enhances access to manifest information, and provides greater transparency for the public about hazardous waste shipments. When fully implemented, the electronic hazardous waste manifest system will reduce the reporting burden to regulated facilities by approximately $90 million annually. In FY 2020, EPA will operate the e-Manifest system and the Agency will collect and utilize fees for the full costs of operation of the system and necessary program expenses.

Oil Spill Prevention Preparedness and Response
Inland oil spills can threaten human health, cause severe environmental damage, and create financial loss to industry and the public. The Oil Spill program helps protect the American people by effectively preventing, preparing for, responding to, and monitoring inland oil spills. EPA serves as the lead responder for cleanup of all inland zone spills, including transportation-related spills, and provides technical assistance and support to the U.S. Coast Guard for coastal and maritime oil spills. In FY 2020, EPA requests a total of $12.4 million for the Oil Spill Prevention, Preparedness and Response program to continue to ensure compliance with preventative measures through inspections, deliver required annual oil spill inspector training to federal and state inspectors, and maintain the National Oil Database and National Contingency Plan product schedule.

Oil Spill Prevention, Preparedness and Response Fee Proposal
EPA proposes new fee authority in the Oil Spill Prevention, Preparedness, and Response program to better support compliance assistance work for Facility Response Plan (FRP) and Spill Prevention Control and Countermeasure (SPCC) facilities. Once authorized, the new voluntary fee and service would provide support for facilities in complying with EPA regulations.

Homeland Security
Terrorist attacks, industrial accidents, and natural disasters can result in acutely toxic chemical, biological or radiological (CBR) contamination causing sickness or death, disruption of drinking water and wastewater services, economic hardship in communities, and even shutdown of urban areas. EPA's Homeland Security work is an important component of the Agency's prevention, protection, and response activities. The FY 2020 Budget includes $55.9 million to maintain Agency capability to respond to incidents that may involve harmful CBR substances. Resources will allow the Agency to develop and maintain expertise and operational readiness to respond to emergencies.

Objective 4: Ensure Safety of Chemicals in the Marketplace. **Effectively implement the Toxic Substances Control Act (TSCA), and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), to ensure new and existing chemicals and pesticides are reviewed for their potential risks to human health and the environment and actions are taken when necessary.**

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

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

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

In FY 2020, EPA requests $226.2 million and 1,020.6 FTE for this strategic objective. Highlights include:

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

[25] There is no baseline for this measure, as the program is operating under new statutory authority.
[26] There is no baseline for this measure, as the program is operating under new statutory authority.
[27] Baseline is 58.4% of determinations made within 90 days in FY 2018. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)
[28] Baseline is 239 decisions completed by the close of FY 2017 out of the known universe of 725. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)
[29] Baseline is an average timeframe of 655 days (range: 93-2,086 days) for PRIA decisions for 68 new active ingredients completed in FY 2015-2017.

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

Healthy Schools Grant Program

The Healthy Schools Grant Program is proposed as a new program in FY 2020 and is designed to protect children and teachers in environments in which they live, play and work. Under this program, funding would be available to identify and help prevent, reduce and resolve environmental hazards and prevent childhood lead exposure, reduce asthma triggers, promote integrated pest management, and reduce or eliminate childhood exposure to one or more toxics in schools across all environmental media.

Although EPA provides grant funding to a wide range of initiatives focused on addressing risks to children's health, the Agency has no comprehensive environmental health management program to support school administrators and others in identifying and addressing some of the most common areas of environmental health concerns found in schools. EPA recognizes that school environmental health challenges differ due to variations in geography, age of school infrastructure, population density, and other factors. In FY 2020, EPA requests $50 million to initiate this new grant program which will target the highest priority efforts to protect human health and the environment in school settings.

Toxics Release Inventory (TRI)

EPA's success in carrying out its mission to protect human health and the environment is contingent in part on collecting and making available timely, high-quality and relevant information. The Toxics Release Inventory (TRI) program supports EPA's mission, including its chemical safety program, by annually making available to the public data reported by industrial and federal facilities on the quantities of toxic chemicals they release each year to air, water or land, or otherwise manage as waste (e.g., through recycling). These facilities also disclose any pollution prevention practices they implemented during the year. TRI is the Agency's premiere source of data on toxic chemicals release and management for communities, non-governmental organizations, industrial facilities, academia and government agencies. The data collected by EPA pertain to more than 650 individual toxic chemicals, and more than 30 chemical categories, from over 20,000 industrial and federal facilities. The Agency employs targeted system enhancements to better manage information flows and scientific tools and models. EPA's FY 2020 Budget proposal includes $7.8 million for this program.

Pesticides

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

Every 15 years, EPA reevaluates previously registered pesticides to ensure they meet current standards. EPA's Pesticides program remains on track to meet the statutory completion date for this 15-year Registration Review period by October 1, 2022. Forward planning serves to ensure, through 2022, EPA will complete all FIFRA-mandated decisions for the Pesticides Registration Review program. At the end of FY 2018, 304 interim or final decisions of a known universe of 725 cases were completed. Through the Pesticide Registration Improvement Act (PRIA), the program continues to ensure new products meet U.S. safety standards, expediting the licensing of new products so they are available in the marketplace for use in agricultural, consumer, and public health pest control needs.

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

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

In FY 2020, $99.4 million is provided to support EPA's Pesticide Registration Review and Registration program. Identifying, assessing, and reducing the risks presented by the pesticides on which our society and economy relies is integral to ensuring environmental and human safety. Chemical and biological pesticides help meet national and global demands for food. They provide effective pest control for homes, schools, gardens, highways, hospitals, and drinking water treatment facilities, while also controlling vectors of disease. The Pesticides program ensures that the pesticides available in the U.S. are safe when used as directed. The program places priority on reduced-risk pesticides that, once registered, will result in increased societal benefits.

In FY 2020, appropriated funding will be augmented by approximately $49 million in pesticides registration and maintenance user fees. The Budget also includes a proposal to expand the use of pesticide fees to support a wider range of registration and registration review activities.

In FY 2020, EPA will continue to review and register new pesticides, new uses for existing pesticides, and other registration requests in accordance with all statutory requirements. In addition, the Agency will review, under the Pesticides Registration Review program, pesticides already in the market against current scientific standards for human health. EPA's FY 2020 activities will continue to involve increased efforts on comprehensive risk assessments to protect the environment.

The Agency also will continue to invest resources to improve the compliance of pesticide registrations with the Endangered Species Act. A portion of the funding will ensure that pesticides are correctly registered and applied in a manner that protects water quality. EPA will continue registration and registration review requirements for antimicrobial pesticides. Additionally, the pesticides program continues to focus on pollinator health, working with other federal partners, states, and private stakeholder groups to stem pollinator declines and increase pollinator habitat.

Together, these activities and programs will minimize exposure to pesticides, maintain a safe and affordable food supply, address public health issues, and minimize property damage that can occur from insects, pests, and microbes. The Agency's worker protection, certification, and training programs will encourage safe pesticide application practices. EPA will continue to emphasize reducing exposures from pesticides used in and around homes, schools, and other public areas to be protective of human health.

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 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Cooperative Federalism	**$317,734.7**	**$322,751.0**	**$228,323.0**	**-$94,428.0**
Enhance Shared Accountability	$300,457.8	$306,554.0	$225,584.0	-$80,970.0
Increase Transparency and Public Participation	$17,276.9	$16,197.0	$2,739.0	-$13,458.0
Total Authorized Workyears	1,123.2	1,145.6	850.0	-295.6

Goal 2: Cooperative Federalism

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

Introduction

The intent that environmental and human health protection is a shared responsibility between the states, tribes, and the federal government is embedded in our environmental laws. Most of the major environmental statutes provide states and tribes the opportunity and responsibility for implementing and sustaining environmental and human health protection programs. More than 45 years after the creation of EPA and the enactment of a broad set of federal environmental protection laws, most states, and to a lesser extent territories and tribes, are authorized to implement EPA-administered environmental programs within their jurisdictions. States have assumed more than 96 percent of the delegable authorities under federal law.[30] EPA retains responsibility for directly implementing federal environmental programs in much of Indian country where eligible tribes have not yet built capacity to take on program responsibility. There also are programs which may not be delegated by statute to the states, tribes or territories, and programs which are delegable, but for which the state, tribe or territory has not sought delegation. Taking a renewed look at them will facilitate constructive dialogue with states and tribes to ensure maximum utilization of resources. EPA will continue to adapt its practices to reduce duplication of effort with authorized states, tribes, and territories, and tailor its oversight of delegated programs. The EPA is focused on providing certainty to the American people, our co-regulators, and the regulated community. EPA will prioritize certainty in three primary areas: certainty to the states and local governments, including tribes; certainty within EPA programs, such as permitting and enforcement actions; and certainty in risk communication.

The relationship between states, tribes, territories, and EPA is not just about who makes decisions, but also how decisions are made and affirming and respecting the sense of shared accountability to provide positive environmental results. Improvements to protecting human health and the environment cannot be achieved by any single actor. Success is derived when the states, tribes, territories, and EPA, in conjunction with affected communities, work together in a spirit of trust, collaboration, and partnership. Effective environmental protection is best achieved when EPA and its state and tribal partners collaborate transparently, welcome public participation and embrace a shared accountability for the outcomes. Active platforms for public participation, including building the capacity of community stakeholders to provide input, encourages deeper collaboration. With public participation opportunities, the beneficiaries of environmental protection – the American people – will be able to more meaningfully engage through their communities, local governments, and state and tribal governments. Including the public's voice in EPA's policy, regulatory, and assistance work, particularly the voices of the most vulnerable among us to environmental and public health challenges, is essential to meeting their needs as the Agency's statutory responsibilities are implemented.

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

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

FY 2020 Activities

Objective 1: Enhance Shared Accountability. **Improve environmental protection through shared governance and enhanced collaboration with state, tribal, local, and federal partners using the full range of compliance assurance tools.**

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

- By September 30, 2022, increase the number of grant commitments achieved by states, tribes, and local communities.[31]
- By September 30, 2022, increase the use of alternative shared governance approaches to address state, tribal, and local community reviews.[32]

In the spirit of cooperative federalism, EPA and its partners have made enormous progress in protecting air, water, and land resources. EPA recognizes states and tribes vary in the environmental challenges they face due to geography, population density, and other factors. The unique relationship among EPA and its co-regulators is the foundation of the nation's environmental protection system; each organization fulfills a critical role based on its expertise, abilities, and responsibilities to protect and improve human health and the environment. EPA will maximize the flexibilities provided by law to accommodate each state's and tribe's unique situation when making regulatory and policy decisions. The FY 2020 Budget includes $10 million for the Multipurpose Grants, which are an example of this commitment to cooperative federalism. These grants afford flexibility to our state and tribal partners by allowing them to target funds toward their highest priority environmental statutory responsibilities consistent with EPA statutes.

EPA recognizes the advances states and tribes have made in implementing environmental laws and programs. This Administration is undertaking a series of initiatives to rethink and reassess where we are and where we want to be with respect to shared governance. These initiatives are

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

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

working to clarify the Agency's statutory roles and responsibilities and tailoring state and tribal oversight to maximize our return on investment, reduce the burden on states and tribes, and ensure continued progress in achieving environmental outcomes. To advance this progress, the Agency will work to provide more certainty to the states and tribes. For example, the Clean Water Act lays out the process by which states can take charge of their own pollutant discharge elimination systems. EPA's recent approval of Idaho's program is a great example of EPA working cooperatively with states to provide them certainty with respect to water permitting. The Agency also is collaborating with states to improve air quality. Since March 2017, EPA has turned an average of one Federal Implementation Plan into a State Implementation Plan each month. These actions provide states clarity and certainty as they strive to reduce air pollution.

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

In FY 2020, $44.2 million is included for the Tribal General Assistance Program Grants, which will continue to assist tribal governments in developing environmental protection program capacity to assess environmental conditions, use relevant environmental information to improve long-range strategic environmental program development planning, and develop environmental programs tailored to tribal government needs consistent with those long-range strategic plans. EPA directly implements the majority of federal environmental programs in Indian country. Therefore, the Agency works with tribes to develop their capacity to administer environmental programs enabling those tribes choosing to do so, the ability to implement federal environmental laws and programs. Consistent with the 1984 Indian Policy and EPA policies on consultation, the Agency works on a government-to-government basis to build tribal capacity to participate with EPA in direct implementation activities, and implement federal programs through delegations, authorizations, and primacy designations. This enables tribes to meaningfully participate in the Agency's policy making, standard setting, and direct implementation activities under federal environmental statutes.

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

Shared Governance

To develop a future model of shared governance – engaging early and meaningfully with states and tribes – taking into account the progress states and tribes have made in protecting human health and the environment, the Agency will focus on core statutory roles and responsibilities. The Agency will use shared governance to work with states and tribes to increase flexibility and to streamline oversight of state and tribal environmental programs. As part of this process, the Agency will work in close collaboration with co-regulators to better understand best practices and approaches that improve environmental program management. The Agency will continue to streamline processes where EPA must review and approve state and tribal actions (e.g., permit

reviews). EPA will continue to work with states and tribes through E-Enterprise for the Environment to agree on shared priorities and allocate roles and responsibilities to inform and update processes and programs. Through shared governance the Agency uses E-Enterprise for the Environment to deliver streamlined processes as well as accessible, reliable information and data that benefit co-regulators and the regulated community. EPA is also exploring the use of a new reporting tool which will reduce reporting burdens while enhancing transparency in grant commitment setting across EPA regions.

EPA's work in FY 2020 will continue to enhance EPA-Tribal partnerships through development and implementation of EPA-Tribal Environmental Plans (ETEPs) and a continued focus on tracking and reporting measurable results of GAP-funded activities. The Agency actively works with tribes choosing to implement federal environmental laws and programs to develop their capacity to administer environmental programs for their lands.

EPA, with its state, tribal, and local partners, ensures consistent and fair enforcement of federal environmental laws and regulations. In collaboration with co-regulators, the Agency uses a full set of compliance assurance tools, such as compliance assistance and monitoring; electronic reporting; traditional enforcement; grant funding to states and tribes; and building tribal capacity. Through E-Enterprise for the Environment, EPA uses a shared governance approach, working with states and tribes, to modernize and streamline the implementation of our environmental programs. EPA, states and tribes work together to develop and deliver better results, often with lower costs and less burden, for the benefit of the public, the regulated community and governmental sectors.

Compliance Assurance

As part of its role of assuring compliance with environmental laws, the Agency will look for cost-effective ways to enhance the compliance assurance tool box in collaboration with its state, tribal, local, federal, and industry partners. For example, the E-Enterprise Web Portal offers a platform or gateway for making shared services available to states, tribes, and EPA to transact business. Tools and services are designed to enhance efficiency, reduce burden on the regulated community, and improve environmental outcomes. In general, an expanded and modernized compliance assurance tool box will enhance EPA's ability to tailor compliance assurance approaches to the differing needs and challenges among authorized states, territories, tribes and regulated entities. EPA continues to work closely with authorized states, tribes, and territories to develop new compliance tools and approaches to make programs more effective and efficient in promoting compliance and remedying violations. Some of the Agency's ongoing collaborative efforts with the Environmental Council of the States (ECOS)[33] include producing webinars to identify new compliance approaches states and/or EPA could pilot and evaluate; increasing training availability; and preparing for advances in pollution monitoring technology.

A key component of EPA's overall compliance assurance program is compliance monitoring. Compliance monitoring allows the regulatory agencies to detect noncompliance, implement timely and appropriate follow-up actions, and promote compliance with the Nation's environmental laws. Effective targeting of compliance monitoring plays a central role in achieving the goals that EPA has set for protecting human health and the environment. On a national level, EPA works closely

[33] 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.

with individual states, tribes, and state and tribal associations to develop, modernize, and implement national compliance monitoring and enforcement response strategies. This ensures a level playing field exists for regulated entities across the country.

Another core element of EPA's compliance assurance program is providing timely and accessible compliance assistance information to the regulated community. The E-Enterprise Web Portal is one conduit for providing this type of information. In addition, EPA will continue partnering with third-party organizations and federal agencies to support the existing web-based, sector-specific compliance assistance centers[34] and other web-based assistance resources. Also, EPA, state, and tribal inspectors will continue to use the inspection process as an opportunity to provide regulated entities with relevant compliance assistance information.

EPA principally focuses compliance monitoring activities, such as field inspections, electronic reporting, and data analysis tools, and where appropriate, follow-up enforcement actions on those programs not currently delegated or delegable to states and tribes, and in delegated or authorized state programs where the state lacks the resources, capacity, or will, to take appropriate action to protect public health and the environment. The Agency provides monitoring, program evaluations, and capacity building to support and complement authorized state, tribal, territorial and local government programs. The Agency also works collaboratively with states in resolving noncompliance at federal facilities, especially states lacking enforcement authorities or the capacity to address these issues. In FY 2020, EPA will increase compliance by reducing the percentage of Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance (SNC) with their permit limits. In addition, the Agency will continue to implement Phase 2 of the NPDES Electronic Reporting Rule which covers the e-reporting rule permitting and compliance monitoring requirements for EPA and states.

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

In FY 2020, EPA requests $90.6 million and 428.7 FTE to fund EPA's compliance monitoring activities.

International Partnerships

To achieve the Agency's domestic environmental and human health objectives, the EPA will work with international partners to address international sources of pollution that impact the United States or our foreign policy objectives – for example, marine litter. Pollution impacts air, water, food crops, and food chains, and can accumulate in foods such as fish. In FY 2020, EPA will continue to engage both bilaterally and through multilateral institutions to improve international cooperation to prevent and address the transboundary movement of pollution. For example, EPA will engage with countries like China to address air pollution that contributes significant pollution to the domestic and international environment. The FY 2020 Budget includes $5.3 million to

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

support the International Sources of Pollution program. EPA efforts include working with international partners to strengthen environmental laws and governance to more closely align with U.S. standards and practices of U.S. industry.

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

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

- By September 30, 2022, eliminate the backlog and meet statutory deadlines for responding to Freedom of Information Act (FOIA) requests.[35]

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

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

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

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

rural communities. In support of this aspect of EPA's work, we are requesting flexibility for subsidization of SRF loans to communities.

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

As part of our work to improve transparency, EPA continues to focus on improving the FOIA process. The complexity and volume of electronic documents required to be searched, collected, and reviewed has increased over time. The Agency will ensure it supports the timely searching and collection of information for purposes of responding to FOIA requests and other information needs in a cost-effective, sustainable manner.

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

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

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 2018 Actuals	FY 2019 Annualized CR	FY 2020 Pres Budget	FY 2020 Pres Budget v. FY 2019 Annualized CR
Rule of Law and Process	**$1,850,873.9**	**$1,899,101.0**	**$1,664,824.0**	**-$234,277.0**
Compliance with the Law	$395,471.0	$403,350.0	$382,124.0	-$21,226.0
Create Consistency and Certainty	$69,927.0	$68,981.0	$66,782.0	-$2,199.0
Prioritize Robust Science	$457,993.3	$481,723.0	$262,880.0	-$218,843.0
Streamline and Modernize	$37,841.1	$37,583.0	$28,670.0	-$8,913.0
Improve Efficiency and Effectiveness	$889,641.5	$907,464.0	$924,368.0	$16,904.0
Total Authorized Workyears	6,249.1	6,416.8	5,628.6	-788.2

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

Introduction

EPA will continue to reinvigorate the rule of law and process as it administers the environmental laws as Congress intended, and to refocus the Agency on its core statutory obligations. To accomplish this, EPA will continue to work cooperatively with states and tribes to ensure compliance with the law, as well as to create consistency and certainty for the regulated community. EPA will continue to take civil or criminal enforcement action against violators of environmental laws.

A robust enforcement program is critically important for addressing violations and promoting deterrence and supports the Agency's mission of protecting human health and the environment. One of EPA's highest priorities is to continue creating consistency and certainty for the regulated community. EPA's policies and rules will reflect common sense, in line with the Agency's statutory authorities, and provide greater regulatory and economic certainty for the public. EPA will enforce the rule of law in a timely manner and take action against those that violate environmental laws to the detriment of human health or the environment.

Consistency in how the laws and regulations are applied across the country is important to industry, citizens and to ensure environmental protection. EPA continues to take a variety of efforts to ensure consistency in the application of laws and regulations, while respecting the unique circumstances of each state and tribe. EPA recognizes the importance of applying rules and policies consistently as well as creating certainty by meeting the statutory deadlines required for EPA's actions. The rule of law also must be built on the application of robust science that is conducted to help the Agency meet its mission and support the states and tribes in achieving their environmental goals. Research, in conjunction with user-friendly applications needed to apply the science to real-world problems, will help move EPA and the states forward in making timely decisions. In FY 2020, EPA scientists will conduct human health, environmental engineering, and ecological research and translate these into planning and analysis tools for localities throughout the United States to facilitate regulatory compliance and improve environmental and human health outcomes.

Equally important is creating certainty around timing and requirements for routine processes. Carrying out this goal requires that EPA improve the efficiency of its internal business and administrative operations. Streamlining EPA's business operations, in particular the permitting processes established by the different environmental statutes, is key to ensuring economic growth, human health, and environmental protection. EPA will continue to modernize its permitting practices to increase the timeliness of reviews and decisions, while working more collaboratively, transparently, and cost effectively to achieve the Agency's mission. At the same time EPA will seek to improve internal operations to create more efficient and effective administrative processes and better leverage modern technology to accomplish its core mission work.

Agency Priority Goals

The Budget highlights EPA's FY 2018-2019 Agency Priority Goals that advance EPA priorities and the *FY 2018-2022 EPA Strategic Plan*.[36] Two of the six APGs support Goal 3:

- **Increase environmental law compliance rate.** Through September 30, 2019, EPA will increase compliance by reducing the percentage of Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits to 21% from a baseline of 24%.[37]

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

FY 2020 Activities

Objective 1: Compliance with the Law. **Timely enforce environmental laws to increase compliance rates and promote cleanup of contaminated sites through the use of all of EPA's compliance assurance tools, especially enforcement actions to address environmental violations.**

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

- By September 30, 2022, reduce the average time from violation identification to correction.
- By September 30, 2022, increase the environmental law compliance rate.[38]

For decades, the protections mandated by federal environmental laws have been essential to the growth of American prosperity. Noncompliance with those laws diminishes shared prosperity and unfairly tilts the field of economic competition in favor of those that skirt the law. To carry out its mission to protect human health and the environment, EPA, in collaboration with state and tribal partners, relies on a strong national compliance assurance and enforcement program. An effective enforcement program is key to ensuring the ambitious goals of the nation's environmental statutes are realized. In all of its work, EPA's enforcement program strives to address noncompliance in an efficient and timely manner, applying a broad range of enforcement and compliance tools to achieve the goal of reducing noncompliance.

In FY 2020, EPA's Superfund enforcement priorities remain focused on addressing the most significant violations consistent with EPA's statutory authorities. In states with authorized programs, EPA and states share enforcement responsibility, with primary enforcement responsibility residing with the state. However, EPA is responsible for addressing violations: (1)

[36] For EPA's APG Action Plans and Quarterly Updates, see https://www.performance.gov/EPA/.
[37] EPA is updating the baseline and related targets due to the discovery of facilities erroneously included in the universe of regulated entities counted in the denominator. The Agency will update the APG baseline and targets in FY 2019 based on these revisions.
[38] This concept will be piloted by focusing initially on decreasing the percentage of Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits. The baseline and targets will be determined in FY 2019. Other program areas may be included in this long-term performance goal during the FY 2018-2022 timeframe. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

in programs that are not delegable to a state or a federally-recognized tribe; or (2) where the state or tribe has not been authorized to implement a delegable program.

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

Through the State Review Framework, EPA periodically reviews authorized state compliance monitoring and enforcement programs for Clean Air Act (CAA) Stationary Sources, Resource Conservation and Recovery Act (RCRA) Hazardous Waste, and the CWA program. This is done using criteria agreed upon by states, to evaluate performance against national compliance monitoring or enforcement program standards. When states do not achieve standards, the Agency works with them to make progress. However, EPA may take a lead implementation role when authorized states have a documented history of failure to make progress toward meeting national standards.

Civil Enforcement

The overall goal of EPA's civil enforcement program is to maximize compliance with the Nation's environmental laws and regulations to protect human health and the environment. The Agency works closely with the U.S. Department of Justice and other federal departments, states, tribes, territories, and local agencies to ensure consistent and fair enforcement of environmental statutes. In FY 2020, EPA will continue to strengthen environmental partnerships with states and tribes, encourage regulated entities to correct violations rapidly, ensure that violators do not realize an economic benefit from noncompliance, and pursue enforcement to deter future violations. EPA requests $150.5 million and 857.1 FTE for the Civil Enforcement program in FY 2020.

EPA recognizes that significant environmental progress has been made over the years, much of it due to enforcement efforts by EPA, states, tribes, and local communities. To maximize EPA's impact, the Agency has refocused efforts toward areas where, in support of the Agency's Strategic Plan, EPA's enforcement actions address significant noncompliance issues and where enforcement can address the most substantial impacts to human health and the environment. EPA also recognizes the role of states and tribes as the primary implementers of federal statutes where authorized by EPA, and will focus compliance assurance and enforcement resources on direct implementation responsibilities, multi-state and national issues, addressing the most significant violations, and assisting authorized states and tribes with technical and scientific support. Providing this compliance assistance helps to ensure a level playing field. EPA is responsible for direct implementation for programs that are not delegable or where a state or tribe has not sought or obtained the authority to implement a particular program (or program component). Examples of non-delegable programs include the Clean Air Act (CAA) mobile source and stratospheric ozone programs, pesticide labeling and registration under FIFRA, virtually all compliance assurance and enforcement in Indian country, and enforcement of the federal Superfund cleanup

program. Additionally, the enforcement of portions of various other laws, including RCRA, the CWA, and stratospheric ozone under the CAA are non-delegable. EPA also will pursue enforcement actions at federal facilities where significant violations are discovered; will ensure that federal facilities are held to the same standards as the private sector; and will provide technical and scientific support to states and tribes with authorized programs.

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

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

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

Superfund Enforcement
Through the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or Superfund), EPA will facilitate prompt site cleanup and use an "enforcement first" approach that maximizes the participation of liable and viable parties in performing and paying for cleanups. The Agency will protect communities by ensuring that potentially responsible parties (PRPs) conduct cleanups at Superfund sites, preserving federal taxpayer dollars for sites where there are no viable contributing parties, and by recovering costs if EPA expends Superfund-appropriated dollars to clean up sites. EPA also will address liability concerns that can be a barrier to potential reuse. Addressing the risks posed by Superfund sites and returning them to productive use strengthens the economy and spurs economic growth. In 2018, the Superfund Enforcement program secured private party commitments totaling $613 million. The use of Superfund enforcement tools this year resulted in cleanup and redevelopment at 150 private party sites.

In FY 2020, EPA will focus its resources on the highest priority sites, particularly those that may present an immediate risk to human health or the environment. In accordance with the Superfund Task Force recommendations, the Agency will improve and revitalize the Superfund program to ensure that contaminated sites across the country are remediated to protect human health and the environment and returned to beneficial reuse as expeditiously as possible. At federally-owned sites, EPA also will focus on resolving formal disputes under the federal facility agreements and implementing the Superfund Task Force recommendations. In FY 2020, EPA requests $155.1 million and 745.3 FTE to fund the Superfund Enforcement program and $7.0 million to fund the Federal Facilities Enforcement program.

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

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

- By September 30, 2022, meet 100% of legal deadlines imposed on EPA.[39]
- By September 30, 2022, eliminate unnecessary or duplicative reporting burdens to the regulated community by 10,000,000 hours.[40]

The environmental regulatory framework is inherently dynamic. As part of its statutory obligations, EPA is required to publish many regulations within a set timeframe each year that implement environmental programs and assist the Agency in meeting its core mission. These regulations address newly mandated responsibilities as well as updates and revisions to existing regulations. As EPA meets its obligations to protect human health and the environment through regulatory action, it must also meet another key responsibility – minimizing "regulatory uncertainty" that unnecessarily causes businesses and communities to face delays, planning inefficiencies, and compliance complexities that impede environmental protection and economic growth and development. EPA will employ a set of strategies to reduce regulatory uncertainty while continuing to improve human health and environmental outcomes consistent with the Agency's authorities as established by Congress and while considering unique state, tribal, and local circumstances. These strategies, which reflect EPA's commitment to cooperative federalism and commitment to the rule of law, also will help advance Agency goals for streamlining and modernizing permitting and enhancing shared accountability. In total, EPA requests $66.8 million in resources to support this objective.

As EPA issues new or revised regulations, businesses and individuals can find it challenging to know which rules apply to them and to adjust their compliance strategies. EPA will reinvigorate its approach to regulatory development and prioritize meeting its statutory deadlines to ensure expectations are clear for the regulated community and the public and Agency actions are defensible and consistent with its authorities. The Agency will work to support greater consistency and transparency in consideration of economic costs in the regulatory development process and implementation of Agency programs. The Agency will use new approaches and flexible tools to minimize regulatory uncertainty and improve communications to realize more consistent and better environmental outcomes. EPA will strengthen working relationships with industry sectors

[39] Baseline will be determined in FY 2019. (No footnote in *FY 2018-2022 EPA Strategic Plan*.)
[40] Baseline is estimated at 173,849,665 information collection and reporting hours.

to better understand their needs and challenges in implementing Agency requirements and with communities to understand their concerns. This knowledge will enable the Agency to develop better policies and regulations to protect human health and the environment in line with the authorities given to EPA by Congress.

In addition, EPA will develop and engage stakeholders in reviewing a draft base catalog of responsibilities that statutes require EPA to perform in programs delegated to states and tribes. In FY 2020, the base catalog and subsequent updates will be completed. This will provide a foundation for better coordination at headquarters and regions. It also will support EPA cooperative federalism commitments aimed at minimizing duplication and overlap among regional offices, headquarters, states, and tribes. This effort also leverages another commitment EPA is making under cooperative federalism—to identify for all environmental media an inventory and timeline for state-led permits that EPA reviews.

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

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

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

- By September 30, 2022, increase the percentage of research products meeting customer needs.[41]

EPA's overall research effort is organized around six integrated and transdisciplinary national research programs. Each program is guided by a Strategic Research Action Plan (StRAP) that is developed in collaboration with EPA's program and regional offices to address their specific needs.[42] 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

[41] Measure text updated from "By September 30, 2022, increase the number of research products meeting customer needs." Based on a pilot survey, 77% of products were delivered in FY 2018 that met customer needs. (Footnote updated from *FY 2018-2022 EPA Strategic Plan*.)

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

safe water, revitalized land, and chemical safety.[43] Working closely with ECOS and its subsidiary, the Environmental Research Institute of the States (ERIS),[44] the Agency will strive to connect state research needs with Agency priorities, and work to improve communication of research results. Through the public-private coalition Interstate Technology and Regulatory Council,[45] 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[46]) made up of recognized experts in various scientific, engineering, and social science fields from industry; business; public and private research institutes or organizations; academia; federal, state, tribal, and local governments; nongovernmental organizations; and other relevant interest areas.

Air Quality

In coordination with the air program, EPA's research efforts will advance the science and provide information critical to improve air quality and to inform stationary source regulations, vehicle and fuel standards and certification, emission inventories, air quality assessments, and domestic ozone actions.[47] The results of Agency research to support air quality program priorities will inform EPA programs; state, tribal, and local air programs; communities; and individuals about measures and strategies to reduce air pollution. Researchers will publish peer-reviewed scientific journal articles to disseminate research findings as appropriate. For example, the Air and Energy Research Program is addressing nitrogen and co-pollutant loadings to watersheds via atmospheric deposition, as well as optimizing approaches to reduce health and risk from uncontrolled wildfires. EPA requests $31.7 million in FY 2020 to conduct air quality research.

Safe and Sustainable Water Resources

In FY 2020, EPA requests $70 million for the Safe and Sustainable Water Resources Program. EPA will develop innovative, cost-effective solutions to current, emerging, and long-term water resource challenges for complex chemical and biological contaminants.[48] Using a systems approach to develop scientific and technological solutions for protecting human health and aquatic ecosystems, EPA researchers partner with program experts; federal and state agencies; tribes; local communities; academia; nongovernmental organizations; and private stakeholders. For example, EPA's researchers are developing laboratory analytical methods, evaluating chemical toxicity, identifying and estimating human exposure to per- and polyfluoroalkyl substances (PFAS), identifying drinking water treatment technologies and providing technical support and data to EPA regions and states that can be used to make informed decisions about managing PFAS. Examples of research include improving methods for rapid and cost-effective monitoring of waterborne pathogens in recreational waters and investigating the health impacts from exposure to harmful algal/cyanobacteria toxins, and developing innovative methods to monitor, characterize, and predict blooms for early action.

---

[43] For more information on EPA's research go to https://www.epa.gov/aboutepa/about-office-research-and-development-ord.
[44] For more information please go to https://www.ecos.org/eris/.
[45] For more information on the Interstate Technology and Regulatory Council, go to http://www.itrcweb.org/.
[46] Please see https://www.epa.gov/bosc.
[47] For more information on EPA's Air Research program go to https://www.epa.gov/air-research.
[48] For more information on EPA's Water Research go to https://www.epa.gov/water-research.

Sustainable and Healthy Communities
EPA requests $65.5 million in FY 2020 to support the Sustainable and Healthy Communities Research Program. EPA will conduct research to support regulatory activities and protocol development for the National Oil and Hazardous Substances Pollution Contingency Plan and provide on-demand technical support at cleanup sites managed by federal, state or tribal governments, as well as assistance during emergencies.[49] 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.[50] Research is being conducted on end-of-life management of PFAS-containing materials (e.g., industrial waste, household waste) to ensure that PFAS from these materials do not impact the environment. Finally, the Sustainable and Healthy Communities program supports a technical assistance function for states, tribes, and local communities on issues pertaining to ecological and human health risk assessment, and site engineering challenges related to PFAS.

Chemical Safety
EPA requests $63.9 million in FY 2020 to support the Chemical Safety Research program. This funding will advance innovative tools that accelerate the pace of data-driven evaluations, enable knowledge-based decisions that protect human health, and advance the science required to anticipate and solve problems. The program will evaluate and predict impacts from chemical use and disposal and provide states and tribes with information, tools, and methods to make better informed, more timely decisions about the thousands of chemicals in the United States.[51]

In June 2018, EPA released a TSCA Alternative Toxicity Testing Strategy Document[52]. This strategic plan, developed jointly by the Chemical Safety research program and the Office of Chemical Safety and Pollution Prevention, promotes development and implementation of test methods within the TSCA program that are better, faster, less expensive, and reduce the need for animal use.

Human Health Risk Assessment
EPA requests $28 million in FY 2020 to support the Human Health Risk Assessment Research program, including the Superfund transfer. EPA will focus on the science of assessments that inform Agency, state, and tribal decisions and policies.[53] These risk assessments provide the research and technical support needed to ensure safety of chemicals in the marketplace, revitalize and return land to communities, provide clean and safe water, and work with states and tribes to improve air quality. Integrated Risk Information System (IRIS) human health assessments are used by EPA and other health agencies to inform national standards, clean-up levels at local sites, and set advisory levels. EPA is working to develop a responsive risk screening process that would engage a cross-agency team and support a singular Agency answer for identified emerging contaminants.

[49] For more information please go to https://www.epa.gov/land-research.
[50] For more information please go to https://www.epa.gov/eco-research and https://www.epa.gov/healthresearch.
[51] Please see https://www.epa.gov/chemical-research.
[52] For more information please to: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/alternative-test-methods-and-strategies-reduce.
[53] Please see https://www.epa.gov/risk/human-health-risk-assessment.

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

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

- By September 30, 2022, reach all permitting-related decisions within 6 months.[54]

EPA implements a host of environmental statutes that affect the regulated community. Permitting requirements under these statutes can impose a variety of costs, including direct costs and opportunity costs related to uncertainty, delay, and cancellation. Delays in the review of applications for permits and modifications by federal, state, or tribal permitting authorities can postpone or prevent manufacturers from building, expanding, or beginning operations, even if the affected operations ultimately may be deemed suitable as proposed. Delays also can impact construction of major infrastructure projects. EPA is committed to speeding up reviews of permits and modifications to create certainty for the business community, leading to more jobs, increased economic prosperity, and streamlined permit renewals, which incorporate up-to-date information and requirements more quickly, thereby improving environmental protection. In FY 2020, EPA requests a total of $28.7 million in support of this strategic objective.

EPA will continue to systematically collect and report permitting data for each of its permitting programs. The Agency also will continue efforts to employ business process improvement strategies, such as Lean, to improve efficiencies in all permitting processes and meet our commitments. The Agency will work with states and use Lean techniques to streamline the review of state-issued permits. EPA will modernize permitting and reporting processes through efforts such as E-Enterprise for the Environment, a shared governance model with EPA, states, and tribes. EPA will work with states and tribes to achieve this objective without overburdening those entities with costly unnecessary reporting systems and technology.

EPA also will consider where policy changes can improve permitting efficiency without sacrificing environmental results. Examples include expanding the scope of minor permit modifications to reduce the number of permit reviews required, reinvigorating the use of 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's Smart Sectors partnership program provides a platform to collaborate with 13 regulated sectors of the economy and develop more sensible approaches to protect the environment and public health. In FY 2020, EPA will continue its progress delivering transparent sector-based environmental and economic performance data to the general public, highlighting best practices for industry, EPA, and states. The Agency will facilitate cross-sector dialogues to identify innovative solutions to environmental problems. Additionally, the program will continue providing sector ombudsmen to connect, facilitate, and convene Agency experts with sector representatives to solve discrete policy, guidance, and implementation issues unique to the sectors.

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

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

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

- By September 30, 2022, reduce unused office and warehouse space by 850,641 square feet.[55]
- By September 30, 2022, reduce procurement processing times by achieving 100% of procurement action lead times (PALT).[56]
- By September 30, 2022, improve 250 operational processes.
- By September 30, 2022, increase enterprise adoption of shared services by four.[57]

Process Improvements

To better support the core mission to protect human health and the environment, EPA will improve the efficiency and effectiveness of its business processes. Focus areas will include financial, facility, human resource, contract, grant, and information technology (IT)/information management (IM). Enhancements will take advantage of new collaborative and cost-effective tools and technologies. The Agency will build a modern and secure work environment that will protect critical information and support its efforts to address the environmental problems of the 21st century. EPA will modernize and improve business processes and operations to promote transparency, efficiency, and effectiveness; enhance collaborative, results-driven partnerships with internal and external business partners; recruit, develop, and maintain a highly-skilled, diverse, and engaged workforce; and improve the capabilities and cost-effectiveness of its IT and IM systems. EPA also will build on progress being made to employ enterprise risk management and increase effective use of data analysis and visualization tools to inform agency decision making. To support this strategic objective, EPA requests a total of $924.4 million in FY 2020.

EPA will apply EPA Lean Management System (ELMS) principles and leverage input from customer-focused councils, advisory groups, workgroups, portfolio reviews, and federal advisory committees to identify business process streamlining opportunities. To improve the efficiency and cost effectiveness of its operations, EPA will standardize and streamline internal business processes in its acquisition, financial management, and grants processes and systems and explore additional federal and/or internal shared services. When EPA applied ELMS to processes across the Agency, process times were reduced by 50 percent on average for those processes.

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

Cybersecurity

[55] Baseline is 5,264,846 square feet as of FY 2017.

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

[57] Baseline is five administrative systems/operations shared services in FY 2017.

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

Information Technology Modernization

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

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

Environmental decision making across media programs requires access to high-quality data and analytical tools. EPA will build shared IT services, maximizing the benefits of our investments and ensuring consistency and scalability in tools and services. EPA programs that receive submissions from outside the Agency, whether from the reporting community, states, tribes, or local governments, will rely increasingly on centrally-developed and maintained information services, decreasing the volume of computer code each program must develop and maintain. Shared services will reduce reporting burden for submitting entities and improve data quality for EPA. EPA programs, states, and tribes will work to establish a common catalog of shared services and agree to a minimum set of common standards and practices.

The Agency will enhance its extensive information resources by designing an enterprise-wide information architecture that will facilitate the electronic management of data and information, as well as multimodal access, effective searching, and ease of use. The Agency's future information management architecture will support official recordkeeping requirements, as well as daily document management, business processes, information access, and legal needs of EPA employees and organizations, while also being flexible, scalable, and cost effective.